

BIBLIOGRAPHY ON QUANTUM LOGICS AND RELATED STRUCTURES

M. Pavičić

*Department of Mathematics, University of Zagreb,
Kačićeva 26, Pošt. pret. 217, CRO-41001 Zagreb, Croatia.*

Summary. The bibliography contains 1851 references on axiomatic structures underlying quantum mechanics with a stress on varieties of algebraico-logical, probabilistic, and operational structures for which the term *quantum logics* is adopted. An index of about 250 keywords picked out from the titles is included and statistics about papers, journals, and authors are presented. Monographs and proceedings on the subject are singled out.

PACS numbers: 01.30.Tt, 03.65.-w — *Bibliography on quantum logic, quantum logic, logico-algebraical structures of quantum mechanics, probabilistico-operational structures of quantum mechanics, quantum formalism.*

This is an interdisciplinary bibliography on axiomatic structures underlying quantum mechanics with a stress on a number of structures which the International Quantum Structures Association recognizes as aspects of and includes in quantum logics. (The Association was founded on 15th September 1990 in Gdańsk during the Quantum Logics meeting.)

In the literature quantum logic is given many different meanings. It is considered to be an orthomodular partially ordered set with the set of states defined on it [712], simply an orthomodular lattice [1349], a row of algebraico-logical structures recently named quantum propositional logic [1135], and finally manuals and semi-Boolean algebras named quantum events logics [1136]. Such a variety of definitions reflects different approaches taken by physicists, mathematicians, logicians, and philosophers of physics who have all jointly contributed to the field. For the purpose of compiling this bibliography I consider quantum logic to mean all the above mentioned structures and under ‘related structures’ I mean the most relevant references to the other axiomatic approaches, notably, Segal algebras, C^* -algebras, von Neumann algebras, and state-observable probability approaches, as well as some more ‘exotic’ axiomatics provided they are technically well elaborated. In addition, a certain number of mathematical elaborations which have turned out to be of particular importance and of direct influence are included. For surveys and comparisons of the approaches we refer to Gudder (1979) and Holdsworth & Hooker (1983).

International Journal of Theoretical Physics, **31**, 373–461 (1992)

The main aim of the present bibliography is twofold: first to draw the attention of researchers of different profiles to each other and second, to fill the gap in the bibliographical material available on the field.

The only proper bibliography on quantum logic was Beehner's (1980). It is compiled mostly from a physicist's and philosopher of physics' point of view. Holdsworth & Hooker (1983) contains an extensive bibliography compiled so as to stress the logical and philosophy of physics approach. Finally, Kalmbach (1983a) and Kalmbach (1986) contain a huge number of references as covered by a mathematician. Ω -bibliography87 should also be mentioned here, as well as the following sections of *Math. Revs.*: 03G12 – Quantum logic, 81B10 – Logical foundations of quantum mechanics, and 06C15 – Complemented lattices, orthocomplemented lattices.

The present bibliography brings together the approaches of the quoted bibliographies and finds a suitable overlap between the references the author himself has come across over the years and those from the afore-mentioned sources.

No divisions have been made because the considerable overlapping of the algebraical, logical, and probabilistic aspects of the considered structures makes any grouping more appropriate for a subsequent resource letter. Here, rather informative titles served a T_EX programme to make an index which is given at the end of the bibliography. The keywords for the index were picked out from the reference titles by Dr. J. Pykacz.

An attempt has been made to make the bibliography second, third,... authors friendly by listing them *all* in the alphabetical order.

The bibliography contains 1851 references and is backed up by a data bank.

The data bank makes it possible to obtain statistics about papers, journals, and authors. Here, I would only like to stress some figures which might be relevant and important for the researchers in the field.

The number of papers appearing annually in journals (i.e. excluding proceedings) stabilized in the early seventies at about 50. The figures are as follows. In the period 1961-65 the average number of papers published annually in journals was 10.8 in 1966-70: 30.2, 1971-75: 47.0, 1976-1980: 54.2, 1981-1985: 60.6, and in 1986-90: 55.0.

The average number of all references appearing annually is: 1961-70: 26.4, 1971-80: 88.5, and 1981-90: 100.7.

The five most important journals for the authors included in this bibliography are: *Int. J. Theor. Phys.* in which 127 papers appeared, *Found. Phys.* (110), *J. Math. Phys.* (81), *Rep. Math. Phys.* (54), and *Commun. Math. Phys.* (50). Of these *Int. J. Theor. Phys.*, *J. Math. Phys.* and *Rep. Math. Phys.* have published papers regularly over the last 25 years. *Commun. Math. Phys.* published 44 papers between 1967 and 1982 and only 7 between 1983 and 1990. Papers which appeared in *Found. Phys.* till 1988 are much more 'related' than belonging to quantum logics "proper." However, two most recent volumes contain a considerable number of "proper quantum logics papers."

Other significant journals are: *Notices, Proc. & Trans. Am. Math. Soc.* (56), *Math. Slovaca* (33), *J. Phil. Logic* (32), *Algebra Universalis* (29), *Bull. Acad. Polon. Sci. (Math., Phys. & Logic)* (27), *Ann. Inst. Henri Poincaré* (26), *Synthese* (26), *Pacif. J. Math.* (26), *Helv. Phys. Acta* (25), *Nuovo Cim. (+ Lett.)* (22), *Studia Logica* (22), *Demonstratio Math.* (21), *Phil. Sci.* (19), *Canad. J. Math.* (17), and *Brit. J. Phil. Sci.* (15).

Of these *Ann. Inst. Henri Poincaré (Phys.)* and *Proc. Am. Math. Soc.* published papers in the field regularly. Others are mostly unequally distributed over years. In particular *Helv. Phys. Acta* published 90% of the papers between 1959–79 and only 10% between 1980–90, while in the other physical journal *Nuovo Cim.* conversely 90% of papers appeared between 1978–1990, as opposed to 10% between 1960–1977. Of mathematical journals *Algebra Universalis*, *Demonstratio Math.* and *Math. Slovaca* published the majority of papers in the eighties, the others in the seventies.

As for the “philosophical” journals figures for *J. Phil. Logic*, *Synthese*, and *Phil. Sci.* tempt us to conclude that philosophy of physics is losing its interest in the subject. (About 80% of the papers appeared in the seventies.)

In this bibliography 575 scientists appear as authors and we estimate that roughly between 400 and 450 of them have been “properly” engaged in the field for some time. Since, on the other hand, only 112 authors took part in writing 5 or more references it turns out that the fluctuation of the researchers in the field is rather high. Yet another aspect of this is that on average 1.3 authors write a paper.

Finally we would like to list the monographs and proceedings at least partially dedicated to the field. (According to Library of Congress Cataloguing the proceedings are mostly referred to the place where a symposium was held. In editors’ entries such a reference name is indicated by boldface.)

The monographs are: Beltrametti, E. G. and G. Cassinelli (1981a), Beran, L. (1985), Birkhoff, G. (1948), Bub, J. (1974), Cohen, D. W. (1989), Destouches–Février, P. (1951), Fáy, Gy. and R. Törös (1970), Gibbins, P. F. (1987), Giuntini, R. (1990), Grätzer, G. (1978), Gross, H. (1979), Gudder, S. P. (1979b), Gudder, S. P. (1988d), Haack, S. (1974), Jajte, R. (1985), Jammer, M. (1974), Jauch, J. M. (1968), Kalmbach, G. (1983a), Kalmbach, G. (1986), Kläy, M. P. (1985), Ludwig, G. (1954), Ludwig, G. (1971), Ludwig, G. (1978), Ludwig, G. (1983), Ludwig, G. (1985), Ludwig, G. (1985a), Ludwig, G. (1987), Mackey, G. W. (1963), Maeda, F. and S. Maeda (1970), Maeda, S. (1980), Meskov, V. S. (1986), Mittelstaedt, P. (1972a), Mittelstaedt, P. (1972b), Mittelstaedt, P. (1976b), Mittelstaedt, P. (1978a), Piron, C. (1976a), Pitowsky, I. (1989), Pták, P. and S. Pulmannová (1989), Pták, P. and S. Pulmannová (1991), Reichenbach, H. (1944), Rüttimann, G.T.(1977b), Scheibe, E. (1973), and Varadarajan, V. S. (1968/70).

The proceedings are: Butts & Hintikka (1977), Cohen & Wartofsky (1969,74), Cologne78,84, Feldafing74, Erice79, Fermi70,77, Fort, M. (1982/85), Hooker75I,79,79II, Ján88,90, Klagenfurt82, Loyola77,79, Marburg73,79, Nitsch et al. (1981), Ontario71,-73I,73II,73III,75, PSA74,76,78,80, Suppes76,80, Tokyo83, Trieste72, Tutzing78,80,82, Vienna84, and Warsaw74.

Acknowledgements. I thank all my colleagues who helped me to check on the items and who drew my attention to a number of references I have not been previously aware of. In particular, I thank Dr. J. Pykacz for many helpful suggestions, careful reading and correcting the manuscript, and extracting the afore-mentioned keywords.

I should also like to thank Prof. P. Mittelstaedt for his kind hospitality at the Institute for Theoretical Physics of the University of Cologne where this work was carried out in part — under the auspices of the Alexander von Humboldt–Stiftung.

I gratefully acknowledge a partial support by the Ministry of Science of Croatia.

BIBLIOGRAPHY

- Aarnes, J. F. (1969), Physical states on a C^* -algebra, *Acta Math.* **122**, 161–172. + Erratum and addendum in Akemann, C. A. and S. M. Newberger (1973). [1]
- Aarnes, J. F. (1970), Quasi-states on C^* -algebras, *Trans. Am. Math. Soc.* **149**, 601–625. [2]
- Abbati, M. and A. Manià (1981), Spectral theory for order unit spaces, *Ann. Inst. Henri Poincaré*, **35 A**, 259–285. [3]
- Abbati, M. and A. Manià (1981a), The quantum logical and the operational description for physical systems, in *Erice79*, pp. 119–127. [4]
- Abbati, M. and A. Manià (1984), Quantum logic and operational quantum mechanics, *Rep. Math. Phys.* **19**, 383–406. [5]
- Abbati, M. and A. Manià (1985), The G-central decomposition of states of statistical systems in the algebraic and in the operational description, *Rep. Math. Phys.* **21**, 291–307. [6]
- Abbott, J. C. (1967), Implication algebras, *Bull. Math. Société Sci. Math. de Roumanie*, **11**, 3–23. [7]
- Abbott, J. C. (1967a), Semi-Boolean algebra, *Matematički vesnik*, **4**, 177–198. [8]
- Abbott, J. C. (1976), Orthoimplication algebras, *Studia Logica*, **35**, 173–177. [9]
- Accardi, L. and C. Chechini (1982), Conditional expectation in von Neumann algebras and a theorem of Takesaki, *J. Func. Anal.* **45**, 245–273. [10]
- Adams, D. H. (1969), The completion by cuts of an orthocomplemented modular lattice, *Bull. Austral. Math. Soc.* **1**, 259–265. [11]
- Adams, D. H. (1970), A note on a paper by P. D. Finch, *J. Austral. Math. Soc.* **9**, 63–64. [12]
- Adams, D. H. (1970a), Semigroup completion of lattices, *Proc. London Math. Soc.* **20**, 659–668 (1970); Corrigendum, *Ibid.* **21**, 576. [13]
- Adams, D. H. (1973), A note on constructible lattices, *J. Austral. Math. Soc.* **15**, 296–297. [14]
- Adams, D. H. (1973a), Equational classes of Foulis semigroups and orthomodular lattices, in Schmidt, J. et al. (eds.), *Proceedings of the Houston lattice theory conference*, University of Houston, Houston (1973), pp. 486–497. [15]
- Adler, C. G. and J. F. Wirth (1983), Quantum logic, *Am. J. Phys.* **51**, 412–417. [16]
- Aerts, D. (1980), Subsystems in physics described by bilinear maps between the corresponding vector spaces, *J. Math. Phys.* **21**, 778–788. [17]
- Aerts, D. (1981), Description of compound physical systems and logical interaction of physical systems, in *Erice79*, pp. 381–403. [18]
- Aerts, D. (1982), Description of many separated physical entities without paradoxes encountered in quantum mechanics, *Found. Phys.* **12**, 1131–1170. [19]
- Aerts, D. (1983), Classical theories and nonclassical theories as special cases of a more general theory, *J. Math. Phys.* **24**, 2441–2453. [20]

- Aerts, D. (1983a)**, The description of one and many physical systems, in Gruber, C. (ed.), *Les Fondaments de la Mécanique Quantique*, A.V.C.P., Lausanne (1983), pp. 63–148. [21]
- Aerts, D. (1984)**, Construction of a structure which enables to describe the joint system of a classical system and a quantum system, *Rep. Math. Phys.* **20**, 117–129. [22]
- Aerts, D. (1984a)**, Construction of the tensor product for the lattices of properties of physical entities, *J. Math. Phys.* **25**, 1434–1441. [23]
- Aerts, D. (1985)**, A possible explanation for the probabilities of quantum mechanics and example of a macroscopical system that violates Bell inequalities, in **Cologne74**, pp. 235–249. [24]
- Aerts, D. (1986)**, A possible explanation for the probabilities of quantum mechanics, *J. Math. Phys.* **27**, 202–210. [25]
- Aerts, D. and I. Daubechies (1978)**, About the structure-preserving maps of a quantum mechanical propositional system, *Helv. Phys. Acta*, **51**, 637–660. [26]
- Aerts, D. and I. Daubechies (1978a)**, Physical justification for using the tensor product to describe two quantum systems as one joint system, *Helv. Phys. Acta*, **51**, 661–675. [27]
- Aerts, D. and I. Daubechies (1979)**, A connection between propositional systems in Hilbert spaces and von Neumann algebras, *Helv. Phys. Acta*, **52**, 184–199. [28]
- Aerts, D. and I. Daubechies (1979a)**, A characterization of subsystems in physics, *Lett. Math. Phys.* **3**, 11–17. [29]
- Aerts, D. and I. Daubechies (1979b)**, A mathematical condition for a sublattice of a propositional system to represent a physical subsystem with a physical interpretation, *Lett. Math. Phys.* **3**, 19–27. [30]
- Aerts, D. and I. Daubechies (1983)**, Simple proof that the structure preserving maps between quantum mechanical propositional systems conserve the angles, *Helv. Phys. Acta*, **56**, 1187–1190. [31]
- Aerts, D. and C. Piron (1979)**, The role of the modular pairs in the category of complete orthomodular lattice, *Lett. Math. Phys.* **3**, 1–10. [32]
- Akemann, C. A. and S. M. Newberger (1973)**, Physical states on a C^* -algebra, *Proc. Am. Math. Soc.* **40**, 500. [33]
- Albertson, J. (1961)**, von Neumann’s hidden-parameter proof, *Am. J. Phys.* **29**, 478–484. [34]
- Alda, V. (1980)**, Remark on two papers concerning axiomatics of quantum mechanics, *Aplikace Matematiky* **25**, 453–456. [35]
- Alda, V. (1980a)**, On 0–1 measure for projectors. I, *Aplikace Matematiky* **25**, 373–374. [36]
- Alda, V. (1981)**, On 0–1 measure for projectors. II, *Aplikace Matematiky* **26**, 57–58. [37]
- Alfsen, E. M. and F. W. Schultz (1975)**, On the geometry of noncommutative spectral theory, *Bull. Am. Math. Soc.* **81**, 893–895. [38]
- Alfsen, E. M. and F. W. Schultz (1978)**, State spaces of Jordan algebras, *Acta Math.* **140**, 155–190. [39]

- Alfsen, E. M. and F. W. Schultz (1979)**, On non-commutative spectral theory and Jordan algebras, *Proc. London Math. Soc.* **38**, 497–516. [40]
- Alfsen, E. M., F. W. Schultz, and E. Størmer (1978)**, A Gelfand–Neumark theorem for Jordan algebras, *Advances in Math.* **28**, 11–56. [41]
- Almog, J. (1978)**, Perhaps (?), new logical foundations are needed for quantum mechanics, *Logique et Analyse*, **21**, (82–83) 253–277. [42]
- Amann, A. (1987)**, Jauch–Piron states in W^* -algebraic quantum mechanics, *J. Math. Phys.* **28**, 2384–2389. [43]
- Amemiya, I. (1957)**, On the representation of complemented modular lattices, *J. Math. Soc. Japan*, **9**, 263–279. [44]
- Amemiya, I. and H. Araki (1966)**, A remark on Piron’s paper, *Publ. Research Inst. Math. Sci.*, **A 2**, No. 3, 423–427 (1966/67). [45]
- Amemiya, I. and I. Halperin (1959)**, Complemented modular lattices, *Canad. J. Math.* **11**, 481–520. [46]
- Anandan, J. (1980a)**, On the hypotheses underlying physical geometry, *Found. Phys.* **10**, 601–629. [47]
- Anger, F. D., J. Sarmiento, and R. V. Rodriguez (1986)**, Representative graphs of r -regular partial planes and representation of orthomodular posets, *Discrete Appl. Math.* **15**, 1–10. [48]
- Anishchenko, S. A. (1968)**, Conditions for the isomorphism of certain modular lattices, *Siberian Math. J.* **9**, 998–1013. [*Sibirsk. Mat. Zh.* **9**, 745–751]. [49]
- Anishchenko, S. A. (1971)**, Modular lattices in which each element is a union of cycles, *Siberian Math. J.* **12**, 177–183 (1971). [*Sibirsk. Mat. Zh.* **12**, 251–260]. [50]
- Anishchenko, S. A. (1972)**, Modulare Verbände und projektive Ebenen, *Trud. Zhurnal Obiedinn. Inst.* **2**, 1–7. [51]
- Araki, H. (1966)** see Amemiya, I. and H. Araki (1966).
- Araki, H. (1972)**, Remarks on spectra of modular operators of von Neumann algebras, *Commun. Math. Phys.* **28**, 267–277. [52]
- Araki, H. (1980)**, On a characterization of the state space of quantum mechanics, *Commun. Math. Phys.* **75**, 1–24. [53]
- Arens, R. (1966)**, Invariant sublogics as a way from scalar to many-component wave equations, *J. Math. Mech.* **15**, 349–371. [54]
- Armstrong, T. (1985)** see Gudder, S. and T. Armstrong (1985).
- Asquith, P. D. and R. N. Giere (1980)** (eds.), **PSA 1980** : (*Proceedings of the 1980 Biennial Meeting of the Philosophy of Science Association*, Philosophy of Science Association), East Lansing, Michigan. [55]
- Asquith, P. D. and I. Hacking (1978)** (eds.), **PSA 1978** (*Proceedings of the 1978 Biennial Meeting of the Philosophy of Science Association*), Philosophy of Science Association, East Lansing, Michigan. [56]
- Bach, A. (1980)**, Probabilistic formulation of quantum theory, *J. Math. Phys.* **21**, 789–793. [57]
- Bach, A. (1983)** see Wenning, T. and A. Bach (1983).
- Bach, A. and T. Wenning (1982)**, A probabilistic formulation of quantum theory. II., *J. Math. Phys.* **24**, 1078–1081. [58]

- Bade, W. (1955)**, On Boolean algebras of projections and algebras of operators, *Trans. Am. Math. Soc.* **80**, 345–360. [59]
- Baker, K. (1969)**, Equational classes of modular lattices, *Pacif. J. Math.* **28**, 9–15. [60]
- Baker, K. (1974)**, Primitive satisfaction and equational problems for lattices and other algebras, *Trans. Am. Math. Soc.* **190**, 125–150. [61]
- Balzer, W. (1981)**, Piron’s foundations of quantum mechanics (Comment on his paper), *Erkenntnis*, **16**, 403–406. [62]
- Bán, J. (1987)**, Martingale convergence theorem in quantum logics, *Math. Slovaca*, **37**, 313–322. [63]
- Banai, M. (1981)**, Propositional systems in local field theories, *Int. J. Theor. Phys.* **20**, 147–169. [64]
- Banai, M. (1981a)**, Propositional systems in field theories and lattice valued quantum logic, in **Erice79**, pp. 425–435. [65]
- Banai, M. (1985)**, Quantization of space–time and the corresponding quantum mechanics, *Found. Phys.* **15**, 1203–1245. [66]
- Banaschewski, B. and G. Bruns (1967)**, Categorical characterization of the McNeille completion, *Arch. Math.* **18**, 369–377. [67]
- Bäni, W. (1979)**, Inner product spaces of infinite dimension; On the lattice method, *Arch. Math.* **33**, 338–347. [68]
- Bannier, U. (1978)** see Haag, R. and U. Bannier (1978).
- Barone, F. and G. P. Galdi (1979)**, On the question of atomicity and determinism in Boolean systems, *Lett. Nuovo Cim.* **24**, 179–182. [69]
- Béaver, O. R. and T. A. Cook (1977)**, States on quantum logic and their connection with a theorem of Alexandroff, *Proc. Am. Math. Soc.* **67**, 133–134. [70]
- Beehner, J. (1980)**, Bibliography on quantum logic, in **Suppes80**, pp. 223–261. [71]
- Belinfante, J. G. F. (1976)**, Transition probability spaces, *J. Math. Phys.* **17**, 285–291. [72]
- Bell, J. L. (1985)**, Orthospaces and quantum logic, *Found. Phys.* **15**, 1179–1202. [73]
- Bell, J. L. (1986)**, A new approach to quantum logic, *Brit. J. Phil. Sci.* **37**, 83–99. [74]
- Bell, J. L. and M. Hallett (1982)**, Logic, quantum logic, and empiricism, *Phil. Sci.* **49**, 355–379. [75]
- Bell, J. S. (1966)**, On the problem of hidden variables in quantum mechanics, *Rev. Mod. Phys.* **38**, 447–452. [76]
- Bell, J. S. (1971)**, Introduction to the hidden–variable question, in **Fermi70**, pp. 171–181. [77]
- Beltrametti, E. G. (1975,77)** see Cassinelli, G. and E. G. Beltrametti (1975,77).
- Beltrametti, E. G. (1985)**, Recent facts in quantum logic and surroundings, in **Cologne84**, pp. 13–31. [78]
- Beltrametti, E. G. (1985a)**, The non-unique decomposition of mixtures: Some remarks, in **Joensuu85**, pp. 85–95. [79]

- Beltrametti, E. G. (1990)**, Quantum logic: A summary of some issues, in Miller, A. I. (ed.), *Sixty-two years of uncertainty: Historical philosophical and physical inquires into the foundations of quantum mechanics* (Proceedings of a NATO Advanced Study Institute held August 5–15, 1989, in Erice, Sicily, Italy), (NATO ASI B Series, Vol. 226), Plenum Press, New York, pp. 281–296. [77A]
- Beltrametti, E. G. and G. Cassinelli (1972)**, Quantum mechanics and p-adic numbers, *Found. Phys.* **2**, 1-7. [80]
- Beltrametti, E. G. and G. Cassinelli (1973)**, On the logic of quantum mechanics, *Z. Naturforsch.* **28a**, 1516–1530. [81]
- Beltrametti, E. G. and G. Cassinelli (1976)**, On the structure of the propositions lattice associated with quantum systems, *Atti Convegni Lincei Acc. Naz. Lincei Roma*, **17-II**, 481–499, [82]
- Beltrametti, E. G. and G. Cassinelli (1976a)**, Logical and mathematical structures of quantum mechanics, *Nuovo Cimento*, **6**, 321–404. [83]
- Beltrametti, E. G. and G. Cassinelli (1977)**, On state transformations induced by yes–no experiments in the context of quantum logic, *J. Phil. Logic*, **6**, 369–379. [84]
- Beltrametti, E. G. and G. Cassinelli (1979)**, Properties of states in quantum logic, in *Fermi77*, pp. 29–70. [85]
- Beltrametti, E. G. and G. Cassinelli (1980)**, Problems of the proposition state structure of quantum mechanics, in Dalla Chiara, M. L. (ed.), *Italian studies in the philosophy of science*, D. Reidel, Dordrecht–Holland. [85A]
- Beltrametti, E. G. and G. Cassinelli (1981)**, On the non–unique decomposability of quantum mixtures, in *Erice79*, pp. 455–464. [86]
- Beltrametti, E. G. and G. Cassinelli (1981a)**, *The logic of quantum mechanics*, Addison–Wesley, Reading. [87]
- Beltrametti, E. G. and B. C. van Fraassen (1981)** (eds.), *Current issues in quantum logic*, (Proceedings of the Workshop on Quantum Logic held in **Erice**, Sicily, December 2–9, 1979, at Ettore Majorana Centre for Scientific Culture), [Ettore Majorana Int. Sci. Series, Volume 8], Plenum Press, New York. [88]
- Benedetti, A. and G. Teppati (1971)**, The decision problem for mathematical structures of quantum theory, *Lett. Nuovo Cim.* **2**, 695–696. [89]
- Bennett, M. K. (1968)**, States on orthomodular lattices, *J. Natur. Sci. Math.* **8**, 47–51. [90]
- Bennett, M. K. (1969)**, Graphical representation of orthomodular lattices, *Notices Am. Math. Soc.* **16**, 789. [91]
- Bennett, M. K. (1970)**, A finite orthomodular lattice which does not admit a full set of states, *SIAM Review*, **12**, 267–271. [92]
- Bennett, M. K. (1970a)**, Numerical invariants on orthomodular lattices, *Notices Am. Math. Soc.* **17**, 207. [93]
- Bennett, M. K. (1971)**, Generalized convexity lattices, *J. Comb. Theory*, **10 A**, 140–144. [94]
- Bennett, M. K. (1986)**, Review of G. Kalmbach’s *Orthomodular lattices*, *Found. Phys.* **16**, 1329–1331. [95]

- Bennett, M. K. and G. Birkhoff (1985)**, Convexity lattices, *Algebra Universalis*, **20**, 1–26. [96]
- Bennett, M. K. and D. J. Foulis (1990)**, Superposition in quantum and classical mechanics, *Found. Phys.* **20**, 733–744. [97]
- Benoist, R. W., J.-P. Marchand, and W. Yourgrau (1977)**, Statistical inference and quantum mechanical measurement, *Found. Phys.* **7**, 827–833. [98]
- Benoist, R. W., J.-P. Marchand, and W. Yourgrau (1978)**, Addendum to “Statistical inference and quantum mechanical measurement,” *Found. Phys.* **8**, 117–118. [99]
- Beran, L. (1972)**, An approach to solvability in orthomodular lattices, *Acta Univ. Carolin. — Math. Phys.* **13**, No. 2, 41–42. [100]
- Beran, L. (1973)**, On a construction of amalgamation. I, *Acta Univ. Carolin. — Math. Phys.* **14**, No. 2, 31–39. [101]
- Beran, L. (1974)**, Modularity in generalized orthomodular lattices, *Comment. Math. Univ. Carolin.* **15**, 189–193. [102]
- Beran, L. (1975)**, On solvability of generalized orthomodular lattices, *Pacif. J. Math.* **57**, 331–337. [103]
- Beran, L. (1975a)**, Reflection and coreflection in generalized orthomodular lattices, *Acta Univ. Carolin. — Math. Phys.* **16**, No.2, 57–61. [104]
- Beran, L. (1976)**, Three identities for ortholattices, *Notre Dame J. Formal Logic*, **17**, 251–252. [105]
- Beran, L. (1976a)**, Formulas for orthomodular lattices, *Studia Sci. Math. Hungar.* **11**, 451–455. [106]
- Beran, L. (1978)**, Über gewisse Sätze vom Foulis–Holland–Type in Booleschen Zwerchverbänden, *J. Reine Angew. Math.* **297**, 214–220. [107]
- Beran, L. (1979)**, On finitely generated orthomodular lattices, *Math. Nachr.* **88**, 129–139. [108]
- Beran, L. (1979a)**, Some applications of Boolean skew–lattices, *Studia Sci. Math. Hungar.* **14**, 183–188. [109]
- Beran, L. (1980)**, Central and exchange properties of orthomodular lattices, *Math. Nachr.* **97**, 247–251. [110]
- Beran, L. (1981)**, Extension of a theorem of Gudder and Schelp to polynomials of orthomodular lattices, *Proc. Am. Math. Soc.* **81**, 518–520. [111]
- Beran, L. (1982)**, Boolean and orthomodular lattices — a short characterization via commutativity, *Acta Univ. Carolin. — Math. Phys.* **23**, No. 1, 25–27. [112]
- Beran, L. (1985)**, *Orthomodular lattices. Algebraic approach*, [Mathematics and its application (*East European Series*)], D. Reidel, Dordrecht–Holland. [113]
- Beran, L. (1985a)**, Special polynomials in orthomodular lattices, *Comment. Math. Univ. Carolin.* **26**, 641–650. [114]
- Beran, L. (1987)**, Distributivity in finitely generated orthomodular lattices, *Comment. Math. Univ. Carolin.* **28**, 433–435. [115]
- Beran, L. (1988)**, On some generalization of prime ideals in orthomodular lattices, in *Ján88*, pp. 1–2 [116]

- Bernini, S. (1981)**, Quantum logic as an extension of classical logic, in **Erice79**, pp. 161–171 [117]
- Berzi, V. and A. Zecca (1974)**, A proposition-state structure. I. The superposition principle, *Commun. Math. Phys.* **35**, 93–99. [118]
- Bevis, J. (1969)**, Matrices over orthomodular lattices, *Glasgow Math. J.* **10**, 55–59. [119]
- Bevis, J. (1970)**, A note on a distributivity relation, *J. London Math. Soc.* **2**, 521–524. [120]
- Bevis, J. (1972)**, A distributivity property in an orthomodular lattice, *Acta Math. Acad. Sci. Hungar.* **23**, 13–19. [121]
- Bevis, J. and C. K. Martin (1969)**, Residuation theory on orthomodular lattices, *Glasgow Math. J.* **10**, 60–65. [122]
- Bigelow, J. C (1976)**, Possible worlds foundations for probability, *J. Phil. Logic*, **5**, 299–320. [123]
- Bigelow, J. C. (1977)**, Semantics of probability, *Synthese*, **36**, 459–472. [124]
- Bigelow, J. C. (1979)**, Quantum probability in logical space, *Phil. Sci.* **46**, 223–243. [125]
- Binder, J. (1986)**, On the interplay of the centre and the state space in quantum logics, *Rep. Math. Phys.* **24**, 337–341. [126]
- Binder, J. (1988)**, A Loomis–Sikorski theorem for logics, *Math. Slovaca*, **38**, 367–371. [127]
- Binder, J. (1988)**, A note on weak hidden variables, *Čas. Pěst. Mat.* **114**, 53–56. [128]
- Binder, J. and M. Navara (1987)**, Quantum logics with lattice state spaces, *Proc. Am. Math. Soc.* **100**, 688–693. [129]
- Binder, J. and P. Pták (1990)**, A representation of orthomodular lattices, *Acta Univ. Carolin. — Math. Phys.* **31**, No. 1, 21–26. [130]
- Birkhoff, G. (1948)**, *Lattice theory*, [American Mathematical Society Colloquium Publications, Vol. XXV], American Mathematical Society, New York. [131]
- Birkhoff, G. (1961)**, Lattices in applied mathematics, *Am. Math. Soc. Proceed. in Pure Math.* **2**, 155–184. [132]
- Birkhoff, G. (1985)** see Bennett, M. K. and G. Birkhoff (1985).
- Birkhoff, G. and J. von Neumann (1936)**, The logic of quantum mechanics, *Ann. Math.* **37**, 823–843; Reprinted in **Hooker75I**, pp. 1–26. [133]
- Bjørnestad, Ø. (1976)**, A note on the so-called yes-no experiments and the foundations of quantum mechanics, *Synthese*, **29**, 243–253 (1974); Reprinted in **Suppes76**, pp. 235–245. [134]
- Bodiou, G. (1957)**, Probabilité sur un treillis non modulaire, *Publ. Inst. Statist. Univ. Paris*, **6**, 11–25. [135]
- Bohm, D. (1971)**, Quantum theory as an indication of a new order in physics. Part A. The development of new orders shown through the history of physics, *Found. Phys.* **1**, 359–381. [136]
- Bohm, D. (1973)**, Quantum theory as an indication of a new order in physics. Part B. Implicate and explicate order in physical law, *Found. Phys.* **3**, 139–168. [137]

- Bohm, D. and J. Bub (1966)**, A refutation of the proof by Jauch and Piron that hidden variables can be excluded in quantum mechanics, *Rev. Mod. Phys.* **38**, 470–475. [138]
- Bohm, D. and J. Bub (1968)**, On hidden variables — A reply to comments by Jauch and Piron and by Gudder, *Rev. Mod. Phys.* **38**, 470–475. [139]
- Bohm, D. and B. J. Hiley (1981)**, On a quantum algebraic approach to a generalized phase space, *Found. Phys.* **11**, 179–203. [140]
- Bohm, D. and B. J. Hiley (1981a)**, Nonlocality in quantum theory understood in terms of Einstein’s nonlinear field approach, *Found. Phys.* **11**, 529–546. [141]
- Bolyai33** see Colloq. Math. Soc. János Bolyai 33 (1983).
- Born, R. (1982)**, Kausalität und Quantenlogik, *Phil. Naturalis* **19**, 583–600. [142]
- Born, R. (1983)**, Physikalische Semantik: Kausalität kontra Quantenlogik, in Weingartner, P. and J. Czermak (eds.), *Epistemology and philosophy of science*, [Proceedings of the 7th International Wittgenstein Symposium, Kirchberg am Wechsel, Austria, August 22–29, 1982], D. Reidel / Hölder–Pichler–Tempsky, Dordrecht–Holland / Wien (1983), pp. 416–422. [143]
- Boston66/68** see Cohen, R. S. and M. W. Wartofsky (1969).
- Boyce, S. (1970)** see Gudder, S. and S. Boyce (1970).
- Brabec, J. (1979)**, Compatibility in orthomodular posets, *Čas. Pěst. Mat.* **104**, 149–153. [144]
- Brabec, J. and P. Pták (1982)**, On compatibility in quantum logic, *Found. Phys.* **12**, 207–212. [145]
- Braunstein, S. L. and C. M. Caves (1988)**, Quantum rules: An effect can have more than one operation, *Found. Phys. Lett.* **1**, 3–12. [146]
- Brody, T. A. (1984)**, On quantum logic, *Found. Phys.* **14**, 409–430. [147]
- Brown, C. C. (1968)**, On the finite measures on the closed subspaces of a Hilbert space, *Proc. Am. Math. Soc.* **19**, 470–472. [148]
- Brown, J. and J. Greechie (1974)**, Reductions and level products of orthomodular posets, *Notices Am. Math. Soc.* **21**, A–45. [149]
- Bruns, G. (1967)** see Banaschewski, B. and G. Bruns (1967).
- Bruns, G. (1976)**, Free ortholattices, *Canad. J. Math.* **28**, 977–985. [150]
- Bruns, G. (1978)**, A finiteness criterion for orthomodular lattices, *Canad. J. Math.* **30**, 315–320. [151]
- Bruns, G. (1979)**, Block–finite orthomodular lattices, *Canad. J. Math.* **31**, 961–985. [152]
- Bruns, G. (1983)**, Varieties of modular ortholattices, *Houston J. Math.* **9**, 1–7. [153]
- Bruns, G. (1984)**, Orthomodular lattices, in Pouzet, M. and D. Richards (eds.), *Orders: Descriptions and roles*, North–Holland, Amsterdam (1984), pp. 99–102. [154]
- Bruns, G. and R. Greechie (1982)**, Some finiteness conditions for orthomodular lattices, *Canad. J. Math.* **34**, 535–549. [155]
- Bruns, G. and R. Greechie (1982a)**, Orthomodular lattices which can be covered by finitely many blocks, *Canad. J. Math.* **34**, 696–699. [156]
- Bruns, G. and R. Greechie (1990)**, Blocks and commutators in orthomodular lattices, *Algebra Universalis*, **27**, 1–9. [157]

- Bruns, G. and G. Kalmbach (1971)**, Varieties of orthomodular lattices, *Canad. J. Math.* **23**, 802–810. [158]
- Bruns, G. and G. Kalmbach (1972)**, Varieties of orthomodular lattices. II, *Canad. J. Math.* **24**, 328–337. [159]
- Bruns, G. and G. Kalmbach (1973)**, Some remarks on free orthomodular lattices, in Schmidt, J. et al. (eds.), *Proceedings of the Houston lattice theory conference*, University of Houston, Houston (1973), pp. 397–408. [160]
- Bub, J. (1966,68)** see Bohm, D. and J. Bub (1966,68).
- Bub, J. (1969)**, What is a hidden variable theory of quantum phenomena?, *Int. J. Theor. Phys.* **2**, 101–123. [161]
- Bub, J. (1973)**, On the completeness of quantum mechanics, in **Ontario71**, pp. 1–65. [162]
- Bub, J. (1973a)**, On the possibility of a phase–space reconstruction of quantum statistics: A refutation of the Bell–Wigner locality argument, *Found. Phys.* **3**, 29–44. [163]
- Bub, J. (1973b)**, Under the spell of Bohr, *Brit. J. Phil. Sci.* **24**, 78–90. [164]
- Bub, J. (1974)**, *The interpretation of quantum mechanics*, D. Reidel, Dordrecht–Holland. [165]
- Bub, J. (1976)**, The statistics on non–Boolean event structures, in **Ontario73III**, pp. 1–16. [166]
- Bub, J. (1976a)**, Hidden variables and locality, *Found. Phys.* **6**, 511–525. [167]
- Bub, J. (1976b)**, Randomness and locality in quantum mechanics, in **Suppes76**, pp. 397–420. [168]
- Bub, J. (1977)**, von Neumann’s projection postulate as a probability conditionalization rule in quantum mechanics, *J. Phil. Logic*, **6**, 381–390. [169]
- Bub, J. (1977a)**, What is philosophically interesting about quantum mechanics?, in **Ontario75**, pp. 69–79. [170]
- Bub, J. (1979)**, Conditional probabilities in non–Boolean possibility structures, in **Hooker79II**, pp. 209–226. [171]
- Bub, J. (1979a)**, The measurement problem in quantum mechanics, in **Fermi77**, pp.71–124. [172]
- Bub, J. (1979b)**, Some reflections on quantum logic and Schrödinger’s cat, *Brit. J. Phil. Sci.* **30**, 27–39. [173]
- Bub, J. (1980)**, Comment on ‘Locality and the algebraic structure of quantum mechanics,’ in **Suppes80**, pp. 149–153. [174]
- Bub, J. (1981)**, Hidden variables and quantum logic — A sceptical review, *Erkenntnis*, **16**, 275–293. [175]
- Bub, J. (1981a)**, What does quantum logic explain?, in **Erice79**, pp. 89–100. [176]
- Bub, J. (1982)**, Quantum logic, conditional probability, and interference, *Phil. Sci.* **49**, 402–421. [177]
- Bub, J. (1985)**, On the nature of randomness in quantum mechanics or how to count quantum logically, in **Cologne84**, pp. 45–59. [178]
- Bub, J. (1989)**, On Bohr’s response to EPR: A quantum logical analysis, *Found. Phys.* **19**, 793–805. [179]

- Bub, J. (1989a)**, The philosophy of quantum mechanics, *Brit. J. Phil. Sci.* **40**, 191–211. [180]
- Bub, J. (1990)**, On Bohr’s response to EPR: II, *Found. Phys.* **20**, 929–941. [181]
- Bub, J. and W. Demopoulos (1974)**, The interpretation of quantum mechanics, in *Boston66/68*, pp. 92–122. [182]
- Bub, J. and W. Demopoulos (1976)**, Critical notice: Paradigms and paradoxes: The philosophical challenge of the quantum domain, *Philosophia*, **6**, 333–334. [183]
- Bub, J. and V. Shiva (1978)**, Non-local hidden variables theories and Bell’s inequality, in *PSA78, Vol. I*, pp. 45–53. [184]
- Bugajska, K. (1974)**, On the representation theorem for quantum logic, *Int. J. Theor. Phys.* **2**, 93–99. [185]
- Bugajska, K. and S. Bugajski (1972)**, On the axioms of quantum mechanics, *Bull. Acad. Polon. Sci., Sér. Sci. Math. Astr. et Phys.* **20**, 231–234. [186]
- Bugajska, K. and S. Bugajski (1972a)**, Hidden variables and 2–dimensional Hilbert space, *Ann. Inst. Henri Poincaré*, **16 A**, 93–102. [187]
- Bugajska, K. and S. Bugajski (1973)**, The lattice structure of quantum logics, *Ann. Inst. Henri Poincaré*, **19 A**, 333–340. [188]
- Bugajska, K. and S. Bugajski (1973a)**, The projection postulate in quantum logic, *Bull. Acad. Polon. Sci., Sér. Sci. Math. Astr. et Phys.* **21**, 873–877. [189]
- Bugajska, K. and S. Bugajski (1973b)**, Description of physical systems, *Rep. Math. Phys.* **4**, 1–20. [190]
- Bugajski, S. (1972,73,73a,73b)** see Bugajska, K. and S. Bugajski (1972–73b).
- Bugajski, S. (1978)**, Probability implication in the logic of classical and quantum mechanics, *J. Phil. Logic*, **7**, 95–106. [191]
- Bugajski, S. (1979)**, Measures on operational logics, *Z. Naturforsch.* **34a**, 785–786. [192]
- Bugajski, S. (1980)**, Only if ‘acrobatic logic’ is non-Boolean, in *PSA80, Vol. I*, pp. 264–271. [193]
- Bugajski, S. (1981)**, The inner language of operational quantum mechanics, in *Erice79*, pp. 283–299. [194]
- Bugajski, S. (1982)**, What is quantum logic?, *Studia Logica*, **41**, 311–316. [195]
- Bugajski, S. (1983)**, Languages and similarity, *J. Phil. Logic*, **12**, 1–18. [196]
- Bugajski, S. (1983a)**, Semantics in Banach spaces, *Studia Logica*, **42**, 81–88. [197]
- Bugajski, S. (1985)** see Lahti, P. J. and S. Bugajski (1985).
- Bugajski, S. and P. J. Lahti (1980)**, Fundamental principles of quantum theory, *Int. J. Theor. Phys.* **19**, 499–514. [198]
- Bugajski, S. and Z. Motyka (1981)**, Generalized Borel law and quantum probabilities, *Int. J. Theor. Phys.* **20**, 263–268. [199]
- Bunce, L. J., M. Navara, P. Pták, and J. D. M. Wright (1985)**, Quantum logics with Jauch–Piron states, *Quart. J. Math. Oxford*, **36**, 261–271. [200]
- Bunce, L. J. and J. D. M. Wright (1984)**, Quantum logics, state space geometry, and operator algebras, *Commun. Math. Phys.* **96**, 345–348. [201]
- Bunce, L. J. and J. D. M. Wright (1985)**, Quantum measures and states on Jordan algebras, *Commun. Math. Phys.* **98**, 187–202. [202]

- Bunce, L. J. and J. D. M. Wright (1985a)**, Quantum logics and convex geometry, *Commun. Math. Phys.* **101**, 87–96. [203]
- Burghardt, F. J. (1980)**, Modal quantum logic and its dialogic foundation, *Int. J. Theor. Phys.* **19**, 843–866. [204]
- Burghardt, F. J. (1984)**, Modalities and quantum mechanics, *Int. J. Theor. Phys.* **23**, 1171–1196. [205]
- Busch, P. and P. J. Lahti (1985)**, A note on quantum theory, complementarity, and uncertainty, *Phil. Sci.* **52**, 64–77. [206]
- Butrick, R. (1971)**, Putnam’s revolution, *Phil. Sci.* **38**, 290–292. [207]
- Butts, R. E. and J. Hintikka (1977)** (eds.), *Foundational problems in the special sciences* [Part two of the Fifth International Congress on Logic, Methodology, and Philosophy of Science, London, Ontario, Canada - 1975], D. Reidel, Dordrecht-Holland. [208]
- Caianiello, E. R. (1980)**, Geometry from quantum mechanics, *Nuovo Cim.* **59 B**, 350–366. [209]
- Caianiello, E. R. (1981)**, Quantum mechanics as curved phase space, in **Tutzing80**, pp. 201–216. [210]
- Cammack, L. A. (1975)**, A new characterization of orthomodular partially ordered sets, *Mat. Vesnik*, **12**, 319–328. [211]
- Cantoni, V. (1975)**, Generalized “transition probability”, *Commun. Math. Phys.* **44**, 125–128. [212]
- Cantoni, V. (1976)**, Enveloping subspaces and the superposition of states, *Commun. Math. Phys.* **50**, 241–244. [213]
- Cantoni, V. (1977)**, The Riemannian structure on the states of quantum-like systems, *Commun. Math. Phys.* **56**, 189–193. [214]
- Cantoni, V. (1982)**, Generalized transition probability, mobility, and symmetries, *Commun. Math. Phys.* **87**, 153–158. [215]
- Cantoni, V. (1985)**, Superpositions of physical states: a metric viewpoint, *Helv. Phys. Acta*, **58**, 956–968. [216]
- Cantoni, V. (1990)**, Intrinsic uncertainty relations, in **Ján90**, pp. 7–12. [217]
- Cantoni, V. and A. Logli (1988)**, Proprietà intrinseche di un sistema fisico e relazioni di indeterminazione, *Boll. Un. Mat. It.* **2 B**, **rm 267–278**. [218]
- Carlson, J. W. and T. L. Hicks (1978)**, A characterization of inner product spaces, *Math. Japonica*, **23**, 371–373. [219]
- Carrega, J.-C., G. Chevalier, and R. Mayet (1984)**, Une classe de treillis orthomodulaires en liason avec une théorème de décomposition, *C. R. Acad. Sci. Paris*, **299**, *Sér. I*, 639–642. [220]
- Carrega, J.-C., G. Chevalier, and R. Mayet (1990)**, Direct decompositions of orthomodular lattices, *Algebra Universalis*, **27**, 480–496. [221]
- Carrega, J.-C. et M. Fort (1983)**, Un problème d’exclusion de treillis orthomodulaires, *C. R. Acad. Sci. Paris*, **296**, *Sér. I*, 485–488. [222]
- Cartwright, N. D. (1974)**, van Fraassen’s modal model of quantum mechanics, *Phil. Sci.* **41**, 199–202. [223]

- Cartwright, N. D. (1978)**, The only real probabilities in quantum mechanics, in *PSA78, Vol. 1*, pp. 54–59. [224]
- Cartwright, N.D.(1979)**, Causal law and effective strategies, *Noûs*, **13**, 419–437. [225]
- Cassinelli, G. (1972,3,6,6a,7,7a,9,80-1a)** see Beltrametti, E. G. and G. Cassinelli (1972-81a).
- Cassinelli, G. and E. G. Beltrametti (1975)**, Ideal, first-kind measurements in a proposition–state structure, *Commun. Math. Phys.* **40**, 7–13. [226]
- Cassinelli, G. and E. G. Beltrametti (1977)**, Quantum logics and ideal measurements of the first kind, in *Strasbourg74*, pp. 63–67. [227]
- Cassinelli, G. and P. Truini (1979)**, Toward a generalized probability theory: Conditional probabilities, in *Fermi77*, pp. 125–133. [228]
- Cassinelli, G. and P. Truini (1984)**, Conditional probabilities on orthomodular lattices, *Rep. Math. Phys.* **20**, 41–52. [229]
- Cassinelli, G. and P. Truini (1985)**, Quantum mechanics of the quaternionic Hilbert spaces based upon the imprimitivity theorem, *Rep. Math. Phys.* **21**, 43–64. [230]
- Cassinelli, G. and N. Zanghí (1983)**, Conditional probabilities in quantum mechanics. I. — Conditioning with respect to a single event, *Nuovo Cim.* **73 B**, 237–245. [231]
- Cassinelli, G. and N. Zanghí (1984)**, Conditional probabilities in quantum mechanics. II. — Additive conditional probabilities, *Nuovo Cim.* **79 B**, 141–154. [232]
- Castell, L., M. Drieschner, and C. F. von Weizsäcker (1975)** (eds.), *Quantum theory and the structure of time and space*, [Papers presented at a conference held in *Feldafing*, July 1974], Carl Hanser Verlag, München. [233]
- Castell, L. and C. F. von Weizsäcker (1979,81,83)** (eds.), *Quantum theory and the structure of time and space, Vols. 3, 4, 5*, [Papers presented at a conference held in *Tutzing*, July 1978,80,82], Carl Hanser Verlag, München. [234]
- Catlin, D. E. (1968)**, Spectral theory in quantum logics, *Int. J. Theor. Phys.* **1**, 285–297; Reprinted in *Hooker79II*, pp. 3–16. [235]
- Catlin, D. E. (1968a)**, Irreducibility conditions on orthomodular lattices, *J. Natur. Sci. Math.* **8**, 81–87. [236]
- Catlin, D. E. (1969)**, Implicative pairs in orthomodular lattices, *Caribbean J. Sci. Math.* **1**, 69–79. [237]
- Catlin, D. E. (1971)**, Cyclic atoms in orthomodular lattices, *Proc. Am. Math. Soc.* **30**, 412–418. [238]
- Cattaneo, G. (1980)**, Fuzzy events and fuzzy logics in classical information systems, *J. Math. Anal. Appl.* **75**, 523–548. [239]
- Cattaneo, G. (1983)**, Canonical embedding of an abstract quantum logic into the partial Baer $*$ -ring of complex fuzzy events, *Fuzzy Sets Syst.* **9**, 179–198. [240]
- Cattaneo, G. (1990)**, Quantum fuzzy intuitionistic (Brower-Zadeh) posets, in *Ján90*, pp. 17–26. [241]
- Cattaneo, G., C. Dalla Pozza, C. Garola, and G. Nisticò (1988)**, On the logical foundations of the Jauch–Piron approach to quantum physics, *Int. J. Theor. Phys.* **27**, 1313–1349. [242]

- Cattaneo, G., G. Franco, and G. Marino (1987)**, Ordering on families of subspaces of pre-Hilbert spaces and Dacey pre-Hilbert spaces, *Boll. Un. Mat. Ital. B* (7) **1**, 167–183. [243]
- Cattaneo, G., C. Garola, and G. Nisticò (1989)**, Preparation–effect versus question–proposition structures, *Physics Essays*, **2**, 197–216. [244]
- Cattaneo, G. and A. Manià (1974)**, Abstract orthogonality and orthocomplementation, *Proc. Cambridge Phil. Soc.* **76**, 115–132. [245]
- Cattaneo, G. and G. Marino (1984)**, Brouwer–Zadeh posets and fuzzy set theory, in Di Nola, A. and A. Ventre (eds.), *Proceedings of the First Napoli Meeting on Fuzzy Systems*, Napoli (1984), pp. 34–42. [246]
- Cattaneo, G. and G. Marino (1986)**, Some interesting posets of subspaces of pre-Hilbert space, *Rend. Sem. Mat. Fis. Milano*, **53**, 69–74. [247]
- Cattaneo, G. and G. Marino (1988)**, Non-usual orthocomplementations on partially ordered sets and fuzziness, *Fuzzy Sets and Systems*, **25**, 107–123. [248]
- Cattaneo, G. and G. Nisticò (1984)**, Orthogonality and orthocomplementations in the axiomatic approach to quantum mechanics: Remarks about some critiques, *J. Math. Phys.* **25**, 513–531. [249]
- Cattaneo, G. and G. Nisticò (1985)**, Complete effect–preparation structures: Attempt of a unification of two different approaches to axiomatic quantum mechanics, *Nuovo Cim.* **90 B**, 161–183. [250]
- Cattaneo, G. and G. Nisticò (1986)**, Semantical structures for fuzzy logics: An introductory approach, in Di Nola, A. and A. Ventre (eds.), *Mathematics of fuzzy systems, ISR Series, Vol. 88*, Verlag TÜV Rheinland, Köln (1986), pp. 33–50. [251]
- Cattaneo, G. and G. Nisticò (1986a)**, Completeness of inner product spaces with respect to splitting subspaces, *Lett. Math. Phys.* **11**, 15–20. [252]
- Cattaneo, G. and G. Nisticò (1987)**, Algebraic properties of complex fuzzy events in classical and in quantum information systems, *J. Math. Anal. Appl.* **122**, 265–299. [253]
- Cattaneo, G. and G. Nisticò (1989)**, Brouwer–Zadeh posets and three-valued Lukasiewicz posets, *Fuzzy Sets and Systems*, **33**, 165–190. [254]
- Cattaneo, G. and G. Nisticò (1990)**, A note on Aerts’ description of separated entities, *Found. Phys.* **20**, 119–132. [255]
- Caves, C. M. (1988)** see Braunstein, S. L. and C. M. Caves (1988).
- Cegła, W. (1981)**, Causal logic of Minkowski space-time, in *Erice* **79**, pp. 419–424. [256]
- Cegła, W. and A. Z. Jadczyk (1977)**, Causal logic of Minkowski space, *Commun. Math. Phys.* **57**, 213–217. [257]
- Cegła, W. and B. Jancewicz (1977)**, Representations of relativistic causality structure by an operator density current, *Rep. Math. Phys.* **11**, 53–63. [258]
- Cerofolini, G. (1980)**, Quantum and subquantum mechanics, *Nuovo Cim.* **50 B**, 286–300. [259]
- Cerofolini, G. (1980a)**, On the nature of the subquantum medium, *Lett. Nuovo Cim.* **29**, 305–309. [260]
- Chechini, C. (1982)** see Accardi, L. and C. Chechini (1982).

- Chen, E. (1971)**, Operator algebra and axioms of measurements, *J. Math. Phys.* **12**, 2364–2371. [261]
- Chen, E. (1973)**, Facial aspect of superposition principle in algebraic quantum theory, *J. Math. Phys.* **14**, 1462–1465. [262]
- Chevalier, G. (1983)**, Relations binaires et congruences dans un treillis orthomodulaire, *C. R. Acad. Sci. Paris*, **296**, Sér. I, 785–788. [263]
- Chevalier, G. (1983a)**, Sur un théorème de décomposition dans les TOM, in **Fort, M. (1982/85)**, pp. 42–44. [264]
- Chevalier, G. (1984)** see Carrega, J.-C., G. Chevalier, and R. Mayet (1984).
- Chevalier, G. (1984a)**, Les congruences d'un treillis orthomodulaire de projection, *C. R. Acad. Sci. Paris*, **299**, Sér. I, 731–734. [265]
- Chevalier, G. (1988)**, Semiprime ideals in orthomodular lattices, *Comment. Math. Univ. Carolin.* **29**, 379–386. [266]
- Chevalier, G. (1988a)**, Orthomodular spaces and Baer $*$ -rings, in **Ján88**, pp. 7–14. [267]
- Chevalier, G. (1989)**, Commutators and decompositions of orthomodular lattices, *Order*, **6**, 181–194. [268]
- Chevalier, G. (1990)**, The relative center property in orthomodular lattices, in **Ján90**, pp. 27–33. [269]
- Chevalier, G. (1990a)**, Around the relative center property in orthomodular lattices, *Proc. Am. Math. Soc.* **112**, 935–948. [270]
- Chevalier, G. and M. Fort (1983/84)**, Treillis orthomodulaires avec un nombre fini de commutateurs, in **Fort, M. (1982/85)**, pp. 38–41. [271]
- Chiara, Dalla, M. L.** see Dalla Chiara, M. L.
- Chilin, V. I. (1978)**, Continuous valuations on logics (in Russian), *Dokl. Akad. Nauk UzSSR*, **6**, 6–8. [272]
- Chovanec, F. (1988,88a)** see Dvurečenskij, A. and V. Chovanec (1988,88a).
- Chovanec, F. (1989)**, Compatibility in quasi-orthocomplemented posets, *Bull. Sous-Ensembl. Flous Appl.* **38**, 28–31. [273]
- Chovanec, F. (1990)**, Compatibility theorem for quasi-orthocomplemented posets, in **Ján90**, pp. 34–37. [274]
- Christensen, E. (1982)**, Measures on projections and physical states, *Commun. Math. Phys.* **86**, 529–538. [275]
- Church, A. (1937)**, Review of G. Birkhoff and J. von Neumann, “The logic of quantum mechanics,” *J. Symb. Logic*, **2**, 44–45. [276]
- Cirelli, R. and P. Cotta-Ramusino (1973)**, On the isomorphism of a ‘quantum logic’ with the logic of the projection in a Hilbert space, *Int. J. Theor. Phys.* **8**, 11–29. [277]
- Cirelli, R., P. Cotta-Ramusino, and E. Novati (1974)**, On the isomorphism of a quantum logic with the logic of the projection in a Hilbert space. II, *Int. J. Theor. Phys.* **11**, 135–144. [278]
- Cirelli, R. and F. Gallone (1973)**, Algebra of observables and quantum logic, *Ann. Inst. Henri Poincaré*, **19 A**, 297–331. [279]

- Clark, I. D. (1973)**, An axiomatisation of quantum logic, *J. Symb. Logic*, **38**, 389–392. [280]
- Cohen, D. W. (1987)**, Quantum theory, in *Encyclopedia of science and technology*, Vol. II, Academic Press, New York. [281]
- Cohen, D. W. (1989)**, *An introduction to Hilbert space and quantum logic*, Springer–Verlag, New York. [282]
- Cohen, D. W. and J. Henle (1985)**, Ultimate stochastic entities, *Int. J. Theor. Phys.* **24**, 329–341. [283]
- Cohen, D. W. and G. T. Rüttimann (1985)**, On blocks in quantum logics, *Rep. Math. Phys.* **22**, 113–123. [284]
- Cohen, D. W. and G. Svetlichny (1987)**, Minimal support in quantum logics and Hilbert space, *Int. J. Theor. Phys.* **26**, 435–450. [285]
- Cohen, R. S., C. A. Hooker, A. C. Michalos, and J. W. van Evra (1976)** (eds.), **PSA1974. Proceedings of the 1974 biennial meeting of the Philosophy of science association**, [Boston studies in the philosophy of science, Vol. 32; Synthese library, Vol 101], D. Reidel, Dordrecht–Holland. [286]
- Cohen, R. S. and M. W. Wartofsky (1969)** (eds.), *Proceedings of the Boston Colloquium for the Philosophy of Science 1966/1968*, [Boston Studies in the Philosophy of Science, Vol. 5], D. Reidel, Dordrecht-Holland. [287]
- Cohen, R. S. and M. W. Wartofsky (1974)** (eds.), *Logical and epistemological studies in contemporary physics*, [Boston Studies in the Philosophy of Science, Vol. 13], D. Reidel, Dordrecht-Holland. [288]
- Cole, E. A. B (1973)**, Perception and operation in the definition of observable, *Int. J. Theor. Phys.* **8**, 155–170. [289]
- Collins, R. E. (1970)**, Generalized quantum theory, *Phys. Rev. D* **1**, 379–389. [290]
- Colloq. Math. Soc. János Bolyai 33 (1983)**, Huhn, A. P. and E. T. Schmidt (Eds.), *Contributions to lattice theory*, North–Holland, Amsterdam. [291]
- Colodny, R. H. (1972)** (ed.), *Paradigms and paradoxes. The philosophical challenge of the quantum domain*, [University of Pittsburgh Series in the Philosophy of Science, Vol. 5], University of Pittsburgh Press, Pittsburgh. [292]
- Cologne78** see Mittelstaedt, P. and J. Pfarr (1980).
- Cologne84** see Mittelstaedt, P. and E.-W. Stachow (1985).
- Cook, T. A. (1975)**, Geometry of infinite quantum logic, *Notices Am. Math. Soc.* **22**, A–338. [293]
- Cook, T. A. (1975a)**, Hahn–Jordan decomposition theorem in infinite quantum logics, *Notices Am. math. Soc.* **22**, A–183,. [294]
- Cook, T. A. (1977)** see Béaver, O. R. and T. A. Cook (1977).
- Cook, T. A. (1978)**, The geometry of generalized quantum logics, *Int. J. Theor. Phys.* **17**, 941–955. [295]
- Cook, T. A. (1978a)**, The Nikodym–Hahn–Vitale–Saks theorem for states on a quantum logic, in **Loyola77**, pp. 275–286. [296]
- Cook, T. A. (1981)**, Some connections for manuals of empirical logic to functional analysis, in **Marburg79**, pp. 29–34. [297]

- Cook, T. A. (1985)**, Banach spaces of weights on quasimanuals, *Int. J. Theor. Phys.* **24**, 1113–1131. [298]
- Cook, T. A. (1986)**, Riesz spaces and quantum logics, in *Proceedings of the Conference on Riesz Spaces, Positive Operators, and Applications*, held at Oxford, MS 1986, University of Mississippi (1986), pp. 4–9. [299]
- Cook, T. A. (1990)** see Olubummo, Y. and T. A. Cook (1990).
- Cook, T. A. and G. T. Rüttimann (1985)**, Symmetries on quantum logics, *Rep. Math. Phys.* **21**, 121–126. [300]
- Cooke, R. M. (1979)**, The Friedman–Putnam realism, *Epistemological Letters*, **24**, 37–39. [301]
- Cooke, R. M. and J. Hilgevoord (1980)**, The algebra of physical magnitudes, *Found. Phys.* **10**, 363–373. [302]
- Cooke, R. M. and J. Hilgevoord (1981)**, A new approach to equivalence in quantum logic, in *Erice79*, pp. 101–113. [303]
- Cooke, R., M. Keane, and W. Moran (1985)**, An elementary proof of Gleason’s theorem, *Math. Proc. Cambridge Phil. Soc.* **98**, 117–128. [304]
- Cooke, R. M. and M. van Lambalgen (1983)**, The representation of Takeuti’s \perp -operator, *Studia Logica*, **42**, 407–415. [305]
- Cooke, R. M. and M. van Lambalgen (1984)**, Correction: “The representation of Takeuti’s \perp -operator,” *Studia Logica*, **43**, 202. [306]
- Cooke, R. M. and M. van Lambalgen (1985)**, Lattice valued commutativity measures, in *Cologne84*, pp. 147–159. [307]
- Cornette, W. M. and S. P. Gudder (1974)**, The mixture of quantum states, *J. Math. Phys.* **15**, 842–850. [308]
- Cotta–Ramusino, P. (1973)** see Cirelli, R. and P. Cotta–Ramusino (1973).
- Cotta–Ramusino, P. (1974)** see Cirelli, R., P. Cotta–Ramusino, and E. Novati (1974).
- Coulson, T. J. (1987)** see Sharma, C. S. and T. J. Coulson (1987).
- Crawford, C. G. (1985)**, Coherency and the construction of finite manuals from event structures, *Congr. Numer.* **50**, 137–153. [309]
- Croisot, R. (1951)**, Contribution a l’étude des treillis semi-modulaires de longueur infinie, *Ann. Sci. Ecole Norm. Sup.* **68**, 203–265. [310]
- Crown, G. D. (1970)**, On the coordinatization theorem of Janowitz, *Bull. Soc. Roy. Sci. Liège*, **39**, 448–450. [311]
- Crown, G. D. (1972)**, Some connections between orthogonality spaces and orthomodular lattices, *Caribbean J. Sci. Math.* **2**, 17–24. [312]
- Crown, G. D. (1975)**, On some orthomodular posets of vector bundles, *J. Natur. Sci. Math.* **15**, 11–25. [313]
- Crown, G. D. (1976)**, A note on distributive sublattices of an orthomodular lattice, *J. Natur. Sci. Math.* **16**, 72–79. [314]
- Cushen, C. and R. Hudson (1971)**, A quantum–mechanical central limit theorem, *J. Appl. Prob.* **8**, 454–469. [315]
- Czelakowski, J. (1974)**, Logic based on partial Boolean σ -algebras (1), *Studia Logica*, **33**, 370–396. [316]

- Czelakowski, J. (1975), Logic based on partial Boolean σ -algebras (2), *Studia Logica*, **34**, 69–86. [317]
- Czelakowski, J. (1978), On extending of partial Boolean algebras to partial $*$ -algebras, *Colloq. Math.* **40**, 14–21. [318]
- Czelakowski, J. (1979), Partial Boolean algebras in a broader sense, *Studia Logica*, **38**, 1–16. [319]
- Czelakowski, J. (1979a), On σ -distributivity, *Colloq. Math.* **41**, 13–24. [320]
- Czelakowski, J. (1981), Partial Boolean algebras in a broader sense as a semantics for quantum logic, *Rep. Math. Logic*, **39**, 19–43. [321]
- Czelakowski, J. (1981a), Partial referential matrices for quantum logics, in **Erice79**, pp. 131–146. [322]
- Czkwianianc, E. (1988), Joint distributions and compatibility of observables in quantum logic, *Math. Slovaca*, **38**, 361–366. [323]
- Dacey, J. C. (1969), Orthomodular spaces and additive measurements, *Caribbean J. Sci. Math.* **1**, 51–67. [324]
- Dacey, J. C. (1990), Arithmetic tools for quantum logic, *Found. Phys.* **20**, 605–619. [325]
- Dähn, G. (1968), Attempt of an axiomatic foundation of quantum mechanics and more general theories. IV., *Commun. Math. Phys.* **9**, 192–211. [326]
- Dähn, G. (1972), The algebra generated by physical filter, *Commun. Math. Phys.* **28**, 109–122. [327]
- Dähn, G. (1972a), Symmetry of the physical probability function implies modularity of the lattice of decision effects, *Commun. Math. Phys.* **28**, 123–132. [328]
- Dähn, G. (1973), Two equivalent criteria for modularity of the lattice of all physical decision effects, *Commun. Math. Phys.* **30**, 69–178. [329]
- Dalla Chiara, M. L. (1976), A general approach to non-distributive logics, *Studia Logica*, **35**, 139–162. [330]
- Dalla Chiara, M. L. (1977), Logical selfreference, set theoretical paradoxes, and the measurement problem in quantum mechanics, *J. Phil. Logic*, **6**, 331–347. [331]
- Dalla Chiara, M. L. (1977a), Quantum logic and physical modalities, *J. Phil. Logic*, **6**, 391–404. [332]
- Dalla Chiara, M. L. (1980), Logical foundation of quantum mechanics, in Agazzi, E. (ed.), *Modern logic — A survey*, D. Reidel, Dordrecht–Holland (1980), pp. 331–351. [333]
- Dalla Chiara, M. L. (1980a), Is there a logic of empirical sciences?, in Dalla Chiara, M. L. (ed.), *Italian studies in the philosophy of science*, D. Reidel, Dordrecht–Holland (1980), pp. 187–196. [334]
- Dalla Chiara, M. L. (1981), Some metalogical pathologies of quantum logic, in **Erice79**, pp. 147–159. [335]
- Dalla Chiara, M. L. (1981), Physical implications in a Kripkean semantical approach to physical theories, in **Scientia83**, pp. 37–52. [336]
- Dalla Chiara, M. L. (1983), The relevance of quantum logic in the domain of non-classical logic, in **Salzburg83**, pp. 7–10. [337]

- Dalla Chiara, M. L. (1983a)**, Some logical problems suggested by empirical theories, in Cohen, R. S. and M. W. Wartofsky (eds.), *Language, logic, and method*, D. Reidel, Dordrecht-Holland (1983), pp. 75–90. [338]
- Dalla Chiara, M. L. (1985)**, Names and descriptions in quantum logic, in *Collogne84*, 189–202. [339]
- Dalla Chiara, M. L. (1986)**, Quantum logic, in Gabbay, D. and F. Guenther (eds.), *Handbook of philosophical logic, Vol. III*, D. Reidel, Dordrecht–Holland (1986), pp. 427–469. [340]
- Dalla Chiara, M. L. and R. Giuntini (1989)**, Paraconsistent quantum logics, *Found. Phys.* **19**, 891–904. [341]
- Dalla Chiara, M. L. and P. A. Metelli (1982)**, Philosophy of quantum mechanics, in *Contemporary philosophy. A new survey*, Martinus Nijhoff, The Hague (1982), pp. 212–247. [342]
- Dalla Chiara, M. L. and G. Toraldo di Francia (1973)**, A logical analysis of physical theories, *Riv. Nuovo Cim.* **3**, No. 1, 1–20. [343]
- Dalla Chiara, M. L. and G. Toraldo di Francia (1976)**, The logical dividing line between deterministic and indeterministic theories, *Studia Logica*, **35**, 1–5. [344]
- Dalla Chiara, M. L. and G. Toraldo di Francia (1979)**, Formal analysis of physical theories, in *Fermi77*, pp. 134–201. [345]
- Dalla Chiara, M. L. and G. Toraldo di Francia (1985)**, “Individuals,” “properties,” and “truths” in the EPR-paradox, in *Joensuu85*, pp. 379–402. [346]
- Dalla Chiara, M. L. and G. Toraldo di Francia (1985a)**, Individuals, kinds, and names, *Versus*, **40**, 31–50. [347]
- Dalla Chiara, M. L. and G. Toraldo di Francia (1988)**, Time, possible worlds, and tensions in the logical analysis of microphysics, in C. Cellucci and G. Sambin (eds.), *Atti del Congresso: Temi e Prospettive della Logica e della Filosofia della Scienza Contemporanea*, Vol. II. CLUEB, Bologna (1988), pp. 57–79. [348]
- Dalla Pozza, C. (1988)** see Cattaneo, G., C. Dalla Pozza, C. Garola, and G. Nisticò (1988).
- Daniel, W. (1984)**, The entropy of observables on quantum logic, *Rep. Math. Phys.* **19**, 325–334. [349]
- Daniel, W. (1986)**, Review of Karl Kraus: *States, effects, and operations. Fundamental notions of quantum theory*, Berlin, 1983, *Rep. Math. Phys.* **24**, 258–261. [350]
- Daniel, W. (1986a)**, An axiomatic approach to quantum dynamical systems, *Hadronic J. Suppl.* **2**, 825–849. [351]
- Daubechies, I. (1978,78a,79,83)** see Aerts, D. and I. Daubechies (1978–83).
- Davey, B. A., W. Poguntke, and I. Rival (1975)**, A characterization of semidistributivity, *Algebra Universalis*, **5**, 72–75. [352]
- Davey, B. A. and I. Rival (1976)**, Finite sublattices of three-generated lattices, *J. Austral. Math. Soc. A* **21**, 171–178. [353]
- Davies, E. (1968)**, On the Borel structure of C^* -algebras, *Commun. Math. Phys.* **8**, 147–163. [354]
- Davies, E. B. (1972)**, Example related to the foundations of quantum theory, *J. Math. Phys.* **13**, 39–41. [355]

- Davies, E. B. and J. T. Lewis (1970)**, An operational approach to quantum probability, *Commun. Math. Phys.* **17**, 239–260. [356]
- Day, A. (1983)**, On some geometrical classes of rings and varieties of modular lattices, *Algebra Universalis*, **17**, 21–33. [357]
- Day, A. (1983a)**, Equational theories of projective geometries, in **Bolyai33**, pp. 227–316. [358]
- Day, A. (1985)**, *Survey article*: Applications of coordinatization in modular lattice theory: The legacy of J. von Neumann, *Order*, **1**, 295–300. [359]
- Deliyannis, P. C. (1971)**, Theory of observables, *J. Math. Phys.* **10**, 2114–2127. [360]
- Deliyannis, P. C. (1971a)**, Generalized hidden variable theorem, *J. Math. Phys.* **12**, 248–254. [361]
- Deliyannis, P. C. (1971b)**, Density of states, *J. Math. Phys.* **12**, 860–862. [362]
- Deliyannis, P. C. (1972)**, Exact and simultaneous measurements, *J. Math. Phys.* **13**, 474–477. [363]
- Deliyannis, P. C. (1973)**, Vector space models of abstract quantum logics, *J. Math. Phys.* **14**, 249–253. [364]
- Deliyannis, P. C. (1975)**, Imbedding of Segal systems, *J. Math. Phys.* **16**, 163–170. [365]
- Deliyannis, P. C. (1976)**, Superposition of states and the structure of quantum logics, *J. Math. Phys.* **17**, 248–254. [366]
- Deliyannis, P. C. (1976a)**, Conditioning of states, *J. Math. Phys.* **17**, 653–659. [367]
- Deliyannis, P. C. (1978)**, Conditioning of states.II, *J. Math. Phys.* **19**, 2341–2345. [368]
- Deliyannis, P. C. (1984)**, Quantum logics derived from asymmetric Mielnik forms, *Int. J. Theor. Phys.* **25**, 217–226. [369]
- Deliyannis, P. C. (1984a)**, Geometrical models for quantum logics with conditioning, *J. Math. Phys.* **25**, 2939–2946. [370]
- Demopoulos, W. (1974,76)** see Bub, J. and W. Demopoulos (1974,76).
- Demopoulos, W. (1976)**, The possibility structure of physical systems, in **Ontario73III**, pp. 55–80. [371]
- Demopoulos, W. (1976a)**, Remark on a paper of Mączyński, *Rep. Math. Phys.* **9**, 171–176. [372]
- Demopoulos, W. (1976b)**, Fundamental statistical theories, in **Suppes76**, pp. 421–431. [373]
- Demopoulos, W. (1976c)**, Critical notice: C. A. Hooker (ed.), “Contemporary research in the foundations and philosophy of quantum theory,” *Synthese*, **33**, 489–504. [374]
- Demopoulos, W. (1976d)**, What is the logical interpretation of quantum mechanics?, in **PSA74**, pp. 721–728. [375]
- Demopoulos, W. (1977)**, Completeness and realism in quantum mechanics, in **Ontario75**, pp. 81–88. [376]
- Demopoulos, W. (1979)**, Boolean representations of physical magnitudes and locality, *Synthese*, **42**, 101–119. [377]

- Demopoulos, W. (1980)**, Locality and the algebraic structure of quantum mechanics, in *Suppes80*, pp. 119–144. [378]
- de Muynck, W. M. (1990)** see Martens, H. and W. M. de Muynck (1990).
- Denecke, H.-M. (1977)**, Quantum logic of quantifiers, *J. Phil. Logic*, **6**, 405–413. [379]
- de Obaldia, E., A. Shimony, and F. Wittel (1988)**, Amplification of Belifante’s argument for the nonexistence of dispersion-free states, *Found. Phys.* **18**, 1013–1021. [380]
- der Merwe, van, A.** see van der Merwe, A.
- d’Espagnat, B. (1971)** (ed.), *Foundations of quantum mechanics*. [Proceedings of the International School of Physics “Enrico Fermi.” *Course II*. Varena on lake Como, Villa Monasterio, June 29 – July 11, 1970], Academic Press, New York. [381]
- d’Espagnat, B. (1973)**, Quantum logic and non-separability, in *Trieste72*, pp. 714–735. [382]
- d’Espagnat, B. (1989)**, Are there realistically interpretable theories?, *J. Stat. Phys.* **56**, 747–766. [383]
- Destouches, J.-L. (1948)**, Intervention d’une logique de modalité dans une théorie physique, *Synthese*, **7**, 411–417 (1948/49). [384]
- Destouches, J.-L. (1956)**, Über den Aussagenkalkül der Experimentalaussagen, *Arch. Math. Logik Grundlag.* **2**, 424–425. [385]
- Destouches-Février, P. (1945)**, Logique adaptée aux théories quantiques, *C. R. Acad. Sci. Paris, Sér. I, A–B* **221**, 287–288. [386]
- Destouches-Février, P. (1948)**, Logique et théories physique, *Synthese*, **7**, 400–410 (1948/49). [387]
- Destouches-Février, P. (1951)**, *La structure des théories physiques*, Presse Universitaire de France, Paris,. [388]
- Destouches-Février, P. (1952)**, Application des logiques modales en physique quantique, *Theoria*, **1**, 167–169. [389]
- Destouches-Février, P. (1954)**, La logique des propositions expérimentales, *Appl. Sci. de Log. Math. Paris*, (1954), 115–118. [390]
- Destouches-Février, P. (1959)**, Logical structure of physical theories, in Henkin, L., P. Suppes, and A. Tarski (eds.), *The axiomatic method with special reference to geometry and physics*, [*Studies in logic and the foundations of physics*], North-Holland, Amsterdam (1959). [391]
- Dichtl, M. (1981)**, There are loops of order three in orthomodular lattices, *Arch. Math.* **37**, 285–286. [392]
- Dichtl, M. (1981a)**, Astroids and pasting, *Algebra Universalis*, **18**, 380–385. [393]
- Dietz, U. (1985)**, A characterization of orthomodular lattices among ortholattices, in *Vienna84*, pp. 99–101. [394]
- di Francia, Toraldo, G.** see Toraldo di Francia, G.
- Dilworth, R. P. (1940)**, On complemented lattices, *Tohoku Math. J.* **47**, 18–23. [395]
- Dilworth, R. P. (1945)**, Lattices with unique complements, *Trans. Am. Math. Soc.* **57**, 123–154. [396]
- Dilworth, R. P. (1950)**, The structure of relatively complemented lattices, *Ann. Math.* **51**, 348–359. [397]

- Dilworth, R. P. (1984)**, Aspects of distributivity, *Algebra Universalis*, **18**, 4-17. [398]
- Dishkant, H. (1972)**, Semantics of the minimal logic of quantum mechanics, *Studia Logica*, **30**, 23–30; Reprinted in **Hooker79II**, pp. 17–29. [399]
- Dishkant, H. (1974)**, The first order predicate calculus based on the minimal logic of quantum mechanics, *Rep. Math. Logic*, **3**, 9–18. [400]
- Dishkant, H. (1977)**, The connective “becoming” and the paradox of electron diffraction, *Rep. Math. Logic*, **9**, 15–21. [401]
- Dishkant, H. (1977a)**, Imbedding of the quantum logic in the modal system of Brower, *J. Symb. Logic*, **42**, 321–328. [402]
- Dishkant, H. (1977b)**, Logic of quantum mechanics, in **Warsaw74**, pp. 368–370. [403]
- Dishkant, H. (1978)**, An extension of the Łukasiewicz to the modal logic of quantum mechanics, *Studia Logica*, **37**, 145–155. [404]
- Dishkant, S. (1980)**, Three propositional calculi of probability, *Studia Logica*, **39**, 49–61. [405]
- Dombrowski, H. D. and K. Horneffer (1964)**, Der Begriff des physikalischen Systems in mathematischer Sicht, *Nachr. Akad. Wiss. Göttingen*, **2**, 67–100. [406]
- Domotor, Z. (1974)**, The probability structure of quantum mechanical systems, *Synthese*, **29**, 155–185; Reprinted in **Suppes76**, pp. 147–177. [407]
- Dorling, J. (1976)**, Review of “Bub, J. [1974]: The interpretation of quantum mechanics”, *Brit. J. Phil. Sci.* **27**, 295–297. [408]
- Dorling, J. (1976)**, Review of “Hooker, C. A. (ed.) [1973]: Contemporary research in the foundations of quantum theory,” *Brit. J. Phil. Sci.* **27**, 299–302. [409]
- Dorling, J. (1976a)**, Review of “Cohen, R. S. and Wartofsky, M. W. (eds.) [1974]: Logical and epistemological studies in contemporary physics,” *Brit. J. Phil. Sci.* **27**, 297–299. [410]
- Dorling, J. (1981)**, How to rewrite a stochastic dynamical theory so as to generate a measurement paradox, in **Erice79**, pp. 115–118. [411]
- Dorninger, D. (1985)**, Lattice operations between observables in axiomatic quantum mechanics, *Int. J. Theor. Phys.* **24**, 951–955. [412]
- Dorninger, D., H. Länger, and M. Maćzyński (1983)**, Zur Darstellung von Observablen auf σ -stetigen Quantenlogiken, *Österreich. Akad. Wiss. Math. — Natur. Klasse, Sitzungsber. Abt. II* **192**, 169–176. [413]
- Dravecký, J. (1984)**, On measurability of superpositions, *Acta Math. Univ. Comenian.* **44–45**, 181–183. [414]
- Dravecký, J., V. Palko, and V. Palková (1987)**, On completion of measures on a q - σ -ring, *Math. Slovaca*, **37**, 37–42. [415]
- Dravecký, J. and J. Šipoš (1980)**, On the additivity of Gudder integral, *Math. Slovaca*, **30**, 299–303. [416]
- Drieschner, M. (1974)**, The structure of quantum mechanics: Suggestions for a unified physics, in **Marburg73**, pp. 250–259. [417]
- Drieschner, M. (1975)**, Lattice theory, groups, and space, in **Feldafing74**, pp. 55–69. [418]
- Drieschner, M. (1977)**, Is (quantum) logic empirical?, *J. Phil. Logic*, **6**, 415–423. [419]

- Duckenfield, C. J. (1969), A continuous geometry as a mathematical model for quantum mechanics, *Comment. Math. Univ. Carolin.* **10**, 217–236. [420]
- Dunn, J. M. (1980), Quantum mathematics, in **PSA80**, Vol. 2, pp. 512–531. [421]
- Dupré, M. J. (1978), Duality for C^* -algebras, in **Loyola77**, pp. 329–338. [422]
- Dvurečenskij, A. (1976), On some properties of transformations of a logic, *Math. Slovaca*, **26**, 131–137. [423]
- Dvurečenskij, A. (1978), Signed states on a logic, *Math. Slovaca*, **28**, 33–40. [424]
- Dvurečenskij, A. (1978a), On convergences of signed states, *Math. Slovaca*, **28**, 289–295. [425]
- Dvurečenskij, A. (1979), Laws of large numbers and the central limit theorems on a logic, *Math. Slovaca*, **29**, 397–410. [426]
- Dvurečenskij, A. (1980) see Pulmannová, S. and A. Dvurečenskij (1980).
- Dvurečenskij, A. (1980a), On a sum of observables in a logic, *Math. Slovaca*, **30**, 187–196. [427]
- Dvurečenskij, A. (1981), On the extension properties for observables, *Math. Slovaca*, **31**, 149–153. [428]
- Dvurečenskij, A. (1981a), On m -joint distribution, *Math. Slovaca*, **31**, 347–352. [429]
- Dvurečenskij, A. (1985), Gleason theorem for signed measures with infinite values, *Math. Slovaca*, **35**, 319–325. [430]
- Dvurečenskij, A. (1985a) see Pulmannová, S. and A. Dvurečenskij (1985).
- Dvurečenskij, A. (1986), On two problems of quantum logics, *Math. Slovaca*, **36**, 253–265. [431]
- Dvurečenskij, A. (1986a), Generalization of Maeda’s theorem, *Int. J. Theor. Phys.* **25**, 1117–1124. [432]
- Dvurečenskij, A. (1987), New look at Gleason’s theorem for signed measures, *Int. J. Theor. Phys.* **26**, 295–305. [433]
- Dvurečenskij, A. (1987a), Hahn–Jordan decomposition for Gleason measures, *Int. J. Theor. Phys.* **26**, 513–522. [434]
- Dvurečenskij, A. (1987b), On joint distribution in quantum logic. I. Compatible observables, *Aplikace Matematiky*, **32**, 427–435. [435]
- Dvurečenskij, A. (1987c), On joint distribution in quantum logic. II. Noncompatible observables, *Aplikace Matematiky*, **32**, 436–450. [436]
- Dvurečenskij, A. (1987d), Joint distributions of observables and measures with infinite values, *Demonstratio Math.* **20**, 121–137. [437]
- Dvurečenskij, A. (1987e), Converse of Eilers–Horst theorem, *Int. J. Theor. Phys.* **26**, 609–612. [438]
- Dvurečenskij, A. (1988), Note on a construction of unbounded measures on a non-separable Hilbert space logic, *Ann. Inst. Henri Poincaré*, **A 48**, 297–310. [439]
- Dvurečenskij, A. (1988a), Completeness of inner product spaces and quantum logic of splitting subspaces, *Lett. Math. Phys.* **15**, 231–235. [440]
- Dvurečenskij, A. (1988b), Gleason’s theorem and its applications, in **Ján88**, pp. 15–19. [441]
- Dvurečenskij, A. (1989), Frame functions, signed measures, and completeness of inner product spaces, *Acta Univ. Carolin. — Math. Phys.* **30**, No. 1, 41–49. [442]

- Dvurečenskij, A. (1989a)**, States on families of subspaces of pre-Hilbert spaces, *Lett. Math. Phys.* **17**, 19–24. [443]
- Dvurečenskij, A. (1989b)**, A state criterion of the completeness for inner product spaces, *Demonstratio Math.* **22**, 1121–1128. [444]
- Dvurečenskij, A. (1989c,90)** see Pulmannová, S. and A. Dvurečenskij (1989,90).
- Dvurečenskij, A. (1990a)**, Regular, finitely additive states and completeness of inner product spaces, in **Ján90**, pp. 47–50. [445]
- Dvurečenskij, A. (1990b)**, Frame function and completeness, *Demonstratio Math.* **23**, 515–519. [446]
- Dvurečenskij, A. and F. Chovanec (1988)**, Fuzzy quantum spaces and compatibility, *Int. J. Theor. Phys.* **27**, 1069–1082. [447]
- Dvurečenskij, A. and F. Chovanec (1988a)**, Compatibility theorem in fuzzy quantum spaces, in **Ján88**, pp. 20–24. [448]
- Dvurečenskij, A. and F. Kôpka (1989)**, On the representation of observables for F -quantum spaces, *Bull. Sous-Ensembl. Flous Appl.* **38**, 24–27. [449]
- Dvurečenskij, A. and F. Kôpka (1990)**, On representation theorems for observables in weakly complemented posets, *Demonstratio Math.* **23**, 911–920 [450]
- Dvurečenskij, A. and L. Mišik (1988)**, Gleason's theorem and completeness of inner product spaces, *Int. J. Theor. Phys.* **27**, 417–426. [451]
- Dvurečenskij, A., T. Neubrunn, and S. Pulmannová (1990)**, Regular states and countable additivity on quantum logics, *Proc. Am. Math. Soc.* (to appear). [452]
- Dvurečenskij, A., T. Neubrunn, and S. Pulmannová (1990a)**, Finitely additive states and completeness of inner product spaces, *Found. Phys.* **20**, 1091–1102. [453]
- Dvurečenskij, A. and S. Pulmannová (1980)**, On the sum of observables in a logic, *Math. Slovaca*, **30**, 393–399. [454]
- Dvurečenskij, A. and S. Pulmannová (1981)**, Random measures on a logic, *Demonstratio Math.* **14**, 305–320. [455]
- Dvurečenskij, A. and S. Pulmannová (1982)**, On joint distributions of observables, *Math. Slovaca*, **32**, 155–166. [456]
- Dvurečenskij, A. and S. Pulmannová (1984)**, Connection between joint distribution and compatibility, *Rep. Math. Phys.* **19**, 349–359. [457]
- Dvurečenskij, A. and S. Pulmannová (1988)**, State on splitting subspaces and completeness of inner product spaces, *Int. J. Theor. Phys.* **27**, 1059–1067. [458]
- Dvurečenskij, A. and S. Pulmannová (1988a)** (eds.), *Proceedings of the First Winter School on Measure Theory*, held at Liptovský **Ján**, January 10–15, 1988, Slovak Academy of Sciences, Bratislava. [459]
- Dvurečenskij, A. and S. Pulmannová (1989)**, Type II joint distribution and compatibility of observables, *Demonstratio Math.* **22**, 479–497. [460]
- Dvurečenskij, A. and S. Pulmannová (1989a)**, A signed measure completeness criterion, *Lett. Math. Phys.* **17**, 253–261. [461]
- Dvurečenskij, A. and S. Pulmannová (1990)** (eds.), *Proceedings of the Second Winter School on Measure Theory*, held at Liptovský **Ján**, January 7–12, 1990, Slovak Academy of Sciences, Bratislava (to appear). [462]

- Dvurečenskij, A. and B. Riečan (1980)**, On the individual ergodic theorem on a logic, *Comment. Math. Univ. Carolin.* **21**, 385–391. [463]
- Dvurečenskij, A. and B. Riečan (1988)**, On joint observables for F -quantum spaces, *Bull. Sous-Ensembl. Flous Appl.* **35**, 10–14. [464]
- Dvurečenskij, A. and B. Riečan (1989)**, Fuzziness and comensurability, *Fascic. Math.* **22**, 39–47. [465]
- Dvurečenskij, A. and A. Tirpáková (1988)**, A note on a sum of observables on F -quantum spaces and its properties, *Bull. Sous-Ensembl. Flous Appl.* **35**, 132–137. [466]
- Dvurečenskij, A. and A. Tirpáková (1989)**, Ergodic theory on quantum spaces, *Bull. Sous-Ensembl. Flous Appl.* **37**, 86–94. [467]
- Dye, H. A. (1955)**, On the geometry of projections in certain operator algebras, *Ann. Math.* **61**, 73–89. [468]
- Eckmann, J.-P. and Ph. Ch. Zabey (1969)**, Impossibility of quantum mechanics in a Hilbert space over a finite field, *Helv. Phys. Acta*, **42**, 420–424. [469]
- Edwards, C. M. (1970)**, The operational approach to algebraic quantum theory.I, *Commun. Math. Phys.* **16**, 207–230. [470]
- Edwards, C. M. (1971)**, Sets of simple observables in the operational approach to quantum theory, *Ann. Inst. Henri Poincaré*, **15 A**, 1–14. [471]
- Edwards, C. M. (1971a)**, Classes of operations in quantum theory, *Commun. Math. Phys.* **20**, 26–56. [472]
- Edwards, C. M. (1972)**, The theory of pure operations, *Commun. Math. Phys.* **24**, 260–288. [473]
- Edwards, C. M. (1974)**, The centre of a physical system, in **Marburg73**, pp. 199–205. [474]
- Edwards, C. M. (1975)**, Alternative axioms for statistical physical theories, *Ann. Inst. Henri Poincaré*, **22 A**, 81–95. [475]
- Edwards, C. M. and G. T. Rüttimann (1985)**, On the facial structure of the unit balls in a GL -space and its dual, *Math. Proc. Cambridge Philos. Soc.* **98**, 305–322. [476]
- Edwards, C. M. and G. T. Rüttimann (1985a)**, Isometries of GL -spaces, *J. London Math. Soc.* **31**, 125–300. [477]
- Edwards, C. M. and G. T. Rüttimann (1988)**, Facial structure of the unit ball of a JBW^* -triple, *J. London Math. Soc.* **38**, 317–332. [478]
- Edwards, C. M. and G. T. Rüttimann (1989)**, Inner ideals in W^* -algebras, *Michigan Math. J.* **36**, 147–159. [479]
- Edwards, C. M. and G. T. Rüttimann (1990)**, On conditional probability in GL spaces, *Found. Phys.* **20**, 859–872. [480]
- Eighthaler, G., H. K. Kaiser, W. B. Müller, and W. Nöbauer (1983)** (eds.), *Contributions to general algebra 2 — Proceedings of the Klagenfurt Conference*, June 10–13, 1982, Hölder–Pichler–Tempsky / Teubner, Wien / Stuttgart. [481]
- Eighthaler, G., H. K. Kaiser, W. B. Müller, and W. Nöbauer (1985)** (eds.), *Contributions to general algebra 3 — Proceedings of the Vienna Conference*, June 21–24, 1984, Hölder–Pichler–Tempsky / Teubner, Wien / Stuttgart. [482]

- Eilers, M. and E. Horst (1975)**, The theorems of Gleason for nonseparable Hilbert spaces, *Int. J. Theor. Phys.* **13**, 419–424. [483]
- Emch, G. G. (1982)**, Quantum and classical mechanics on homogeneous Riemannian manifolds, *J. Math. Phys.* **23**, 1785–1791. [484]
- Emch, G. and J. M. Jauch (1965)**, Structures logiques et mathématiques en physique quantique, *Dialectica*, **19**, 259–279. [485]
- Emch, G. and C. Piron (1963)**, Symmetry in quantum theory, *J. Math. Phys.* **4**, 469–473. [486]
- Erice79** see Beltrametti, E. G. and B. C. van Fraassen (1981).
- Erwin, E. (1978)**, Quantum logic and the status of classical logic, *Logique et Analyse*, **21**, (82–83), 279–292. [487]
- Essler, W. K. and G. Zoubek (1981)**, Piron’s approach to the foundations of quantum mechanics, *Erkenntnis*, **16**, 411–418. [488]
- Evans, T. (1978)**, Word problems, *Bull. Am. Math. Soc.* **84**, 789–802. [489]
- Evrard, D. (1987)** see Thieffine, F. and D. Evrard (1987).
- Fäßler–Ullmann, A. (1983)**, On nonclassical Hilbert spaces, *Expositiones Mathematicae*, **3**, 275–277. [490]
- Faulkner, J. R. (1982)**, Measurement systems and Jordan algebras, *J. Math. Phys.* **23**, 1617–1621. [491]
- Fáy, Gy. (1967)**, Transitivity of implication in orthomodular lattices, *Acta Sci. Math. Szeged.* **28**, Fasc. 3–4, 267–270. [492]
- Fáy, Gy. (1970)**, A phenomenological foundation of quantum logic, *Acta Phys. Hung.* **29**, 27–33. [493]
- Fáy, Gy. and R. Törös (1970)**, *Kvantumlogika*, Goudolat, Budapest. [494]
- Feldafing74** see Castell, L., M. Drieschner, and C. F. von Weizsäcker (1975).
- Fermi70** see D’Espagnat, B. (1971).
- Fermi77** see Toraldo di Francia, G. (1977).
- Feyerabend, P. (1958)**, Reichenbach’s interpretation of quantum mechanics, *Philosophical Studies*, **9**, 49–59; Reprinted in **Hooker75I**, pp. 109–121. [495]
- Feynman, R. P. (1986)**, Quantum mechanical computers, *Found. Phys.* **16**, 507–531. [496]
- Fillmore, P. A. (1965)**, Perspectivity in projection lattices, *Proc. Am. Math. Soc.* **16**, 383–387. [497]
- Finch, P. D. (1969)**, On the structure of quantum logic, *J. Symb. Logic*, **34**, 275–282 (1969); Reprinted in **Hooker75I**, pp.415–425. [498]
- Finch, P. D. (1969a)**, Sasaki projections on orthocomplemented posets, *Bull. Austral. Math. Soc.* **1**, 319–324. [499]
- Finch, P. D. (1969b)**, On the lattice structure of quantum logic, *Bull. Austral. Math. Soc.* **1**, 333–340. [500]
- Finch, P. D. (1969c)**, On von Neumann’s statistical formulas in quantum mechanics, *Nanta Mathematica*, **3**, 28–44. [501]
- Finch, P. D. (1970)**, On orthomodular posets, *J. Austral. Math. Soc.* **9**, 57–62. [502]
- Finch, P. D. (1970b)**, Quantum logic as an implication algebra, *Bull. Austral. Math. Soc.* **2**, 101–106. [503]

- Finch, P. D. (1970c)**, Orthogonality relations and orthomodularity, *Bull. Austral. Math. Soc.* **2**, 125–128. [504]
- Finch, P. D. (1970d)**, A transposition principle in orthomodular lattices, *Bull. London Math. Soc.* **2**, 49–52. [505]
- Finch, P. D. (1973)**, On the interference of probabilities, *Bull. London Math. Soc.* **5**, 218–220. [506]
- Finch, P. D. (1976)**, Incomplete descriptions in the language of probability theory, in **Ontario73I**, pp. 23–28. [507]
- Finch, P. D. (1976a)**, On the interference of probabilities, in **Ontario73III**, pp. 105–109. [508]
- Finch, P. D. (1976b)**, Quantum mechanical physical quantities as random variables, in **Ontario73III**, pp. 81–103. [509]
- Finch, P. D. (1980)**, The formal structure of observational procedures, in Hall, T., P. R. Jones, and G. B. Preston (eds.), *Semigroups*, Academic Press, New York (1980), pp. 239–255. [510]
- Fine, A. I. (1968)**, Logic, probability, and quantum theory, *Phil.Sci.***35**,101-111. [511]
- Fine, A. I. (1969)**, On the general quantum theory of measurement, *Proc. Cambridge Phil. Soc.* **65**, 111-122. [512]
- Fine, A. (1972a)**, Some conceptual problems of quantum theory, in **Colodny, R. G. (1972)**, pp. 3–31. [513]
- Fine, A. I. (1973)**, Probability and the interpretation of quantum mechanics, *Brit. J. Phil. Sci.* **24**, 1–37. [514]
- Fine, A. I. (1979)**, How to count frequencies: A primer for quantum realist, *Synthese*, **42**, 145–154. [515]
- Fine, A. I. and P. Teller (1978)**, Algebraic constraints on hidden variables, *Found. Phys.* **8**, 629-636. [516]
- Fine, T. L. (1974)**, Towards a revised probabilistic basis for quantum mechanics, *Synthese*, **29**, 187–201; Reprinted in **Suppes76**, 179–193. [517]
- Finkelstein, D. (1963)**, The logic of quantum physics, *Trans. New York Acad. Sci.* **25**, 621–635. [518]
- Finkelstein, D. (1969)**, Matter, space, and logic, in **Boston66/68**, pp. 199–215; Reprinted in **Hooker79II**, pp. 123–139. [519]
- Finkelstein, D. (1969a)**, Space–time code, *Phys. Rev.* **184**, 1261–1271. [520]
- Finkelstein, D. (1972)**, Space–time code. II, *Phys. Rev. D* **5**, 320–328. [521]
- Finkelstein, D. (1972a)**, Space–time code. III, *Phys. Rev. D* **5**, 2922–2931. [522]
- Finkelstein, D.(1972b)**, The physics of logic, in **Colodny, R. G. (1972)**,47-66. [523]
- Finkelstein, D.(1973)**, A process conception of nature, in **Trieste72**, 709-713.[524]
- Finkelstein, D. (1974)**, Space–time code. IV, *Phys. Rev. D* **9**, 2219–2231. [525]
- Finkelstein, D. (1976)**, Classical and quantum probability and set theory, in **Ontario73III**, pp. 111–119. [526]
- Finkelstein, D. (1977)**, The Leibnitz project, *J. Phil. Logic*, **6**, 425–439; Reprinted in **Hooker79II**, 423–437. [527]

- Finkelstein, D. (1978)**, Beneath time: Exploration in quantum topology, in Fraser, J. T., N. Lawrence, and D. Park (eds.), *The study of time.III*, Springer-Verlag, New York (1978), pp. 94–114. [528]
- Finkelstein, D. (1979)**, Process philosophy and quantum dynamics, in **Hooker79**, 1-18. [529]
- Finkelstein, D. (1979a)**, Hollistic methods in quantum logic, in **Tutzing78**, 37–59. [530]
- Finkelstein, D. (1980)**, Quantum logic and quantum mappings, in **Loyola79**, 79–94. [531]
- Finkelstein, D. (1981)**, Quantum set theory and geometry, in **Tutzing80**, 31-41. [532]
- Finkelstein, D. (1981a)**, Quantum sets, assemblies, and plexi, in **Erice79**, 323–331. [533]
- Finkelstein, D. (1982)**, Quantum sets and Clifford algebras, *Int. J. Theor. Phys.* **21**, 489–503. [534]
- Finkelstein, D. (1983)**, Quantum set theory and applications, in **Salzburg83**, 51. [535]
- Finkelstein, D. (1987)**, Coherent quantum logic, *Int. J. Theor. Phys.* **26**, 109-129. [536]
- Finkelstein, D. (1988)**, “Superconducting” causal nets, *Int. J. Theor. Phys.* **27**, 473–519. [537]
- Finkelstein, D. (1989)**, Quantum net dynamics, *Int. J. Theor. Phys.* **28**, 441-467. [538]
- Finkelstein, D. and S. R. Finkelstein (1983)**, Computational complementarity, *Int. J. Theor. Phys.* **22**, 753–779. [539]
- Finkelstein, D., S. R. Finkelstein, and C. Holm (1986)**, Hyperspin manifolds, *Int. J. Theor. Phys.* **25**, 441–463. [540]
- Finkelstein, D., G. Frye, and L. Susskind (1974)**, Space-time code. V, *Phys. Rev. D* **9**, 2231–236. [541]
- Finkelstein, D., J. M. Jauch, S. Schiminovich and D. Speiser (1962)**, Some phybreak sical consequences of general Q-covariance, *Helv. Phys. Acta*, **35**, 328-329. [542]
- Finkelstein, D., J. M. Jauch, S. Schiminovich and D. Speiser (1962a)**, Foundations of quaternion quantum mechanics, *J. Math. Phys.* **3**, 207–220. [543]
- Finkelstein, D., J. M. Jauch, S. Schiminovich and D. Speiser (1963)**, Principle of general Q-covariance, *J. Math. Phys.* **4**, 788–796. [544]
- Finkelstein, D., J. M. Jauch, and D. Speiser (1979)**, Notes on quaternion quantum mechanics, in **Hooker79II**, 367–421. [545]
- Finkelstein, D. and G. McCollum (1975)**, Unified quantum theory, in **Feldafing74**, pp. 15–54. [546]
- Finkelstein, D. and E. Rodriguez (1984)**, The quantum pentacle, *Int. J. Theor. Phys.* **23**, 1065–1098. [547]
- Finkelstein, D. and E. Rodriguez (1985)**, Application of quantum set theory to quantum time-space, in **Cologne84**, pp. 315–318. [548]
- Finkelstein, D. and E. Rodriguez (1986)**, Algebras and manifolds: differential, difference, simplicial and quantum, in Campbell, D., A. Newell, B. Schrieffer, and H. Segur (eds.), *Solitons and coherent structures*, [Proceedings of the conference

- held in Santa Barbara, California, Januar 11–16, 1985], *Phys.* **18D**, No. 1–3, North-Holland, Amsterdam – New York (1986), pp. 197–208. [549]
- Finkelstein, S. R. (1983)** see Finkelstein, D. and S. R. Finkelstein (1983).
- Finkelstein, S. R. (1986)** see Finkelstein, D., S. R. Finkelstein, and C. Holm (1986).
- Fischer, H. R. and G. T. Rüttimann (1978)**, Limits of manuals and logics, in *Loyola77*, pp. 123–153. [550]
- Fischer, H. R. and G. T. Rüttimann (1978a)**, The geometry of the state space, in *Loyola77*, pp. 153–176. [551]
- Flachsmeyer, J. (1982)**, Note on orthocomplemented posets, in *Proceedings of the Conference on Topology and Measure. III*, [Vittel–Hiddensee, 1980], Part 1, *Wissen. Beitr.*, Ernst–Moritz–Arndt Universität, Greifswald (1982), pp. 65–73. [552]
- Flachsmeyer, J. (1982a)**, Note on orthocomplemented posets II, *Suppl. Rend. Circ. Mat. Palermo*, **2**, 67–74. [553]
- Flachsmeyer, J. (1990)**, Neutral elements and the direct product representation of ortholattices, in *Ján90*, pp. 51–56. [554]
- Flato, M., Z. Marić, A. Milojević, D. Sternheimer, and J. P. Vigiér (1976)** (eds.), *Quantum mechanics, determinism, causality, and particles. An international collection of contributions in honor of Luis de Broglie on the occasion of the jubilee of his celebrated thesis*, D. Reidel, Dordrecht-Holland. [555]
- Fort, M. (1983)** see Carrega, J.-C. et M. Fort (1983).
- Fort, M. (1983/84)** see Chevalier, G. et M. Fort (1983/84).
- Fort, M. (1982/85)** (ed.), *Séminaire: Logique quantique et treillis orthomodulaires*, Université de Lyon I, Villeurbanne Cedex (1982–1985). [556]
- Foulis, D. J. (1960)**, Baer $*$ -semigroups, *Proc. Am. Math. Soc.* **11**, 648–654; Reprinted in *Hooker75I*, pp. 141–148. [557]
- Foulis, D. J. (1961)**, Conditions for modularity of an orthomodular lattice, *Pacif. J. Math.* **11**, 889–895. [558]
- Foulis, D. J. (1962)**, A note on orthomodular lattice, *Portugal. Math.* **21**, 65–72. [559]
- Foulis, D. J. (1963)**, Relative inverses in Baer $*$ -semigroups, *Mich. Math. J.* **10**, 65–84. [560]
- Foulis, D. J. (1965)**, Semigroups coordinating orthomodular geometries, *Canad. J. Math.* **17**, 40–51. [561]
- Foulis, D. J. (1968)**, Multiplicative elements in Baer $*$ -semigroups, *Math. Ann.* **175**, 297–302. [562]
- Foulis, D. J. (1970,2,3,6,9,9a,81,3,4)** see Randall, C. H. and D. J. Foulis (1970–84).
- Foulis, D. J. (1973)** see Randall, C. H., M. F. Janowitz, and D. J. Foulis (1973).
- Foulis, D. J. (1980)** see Frazer, P. J., D. J. Foulis, and C. H. Randall (1980).
- Foulis, D. J. (1987)** see Kläy, M. P., D. J. Foulis, and C. H. Randall (1987).
- Foulis, D. J. (1989)**, Coupled physical systems, *Found. Phys.* **19**, 905–922. [563]
- Foulis, D. J. (1990)** see Schroeck Jr., F. E. and D. J. Foulis (1990).
- Foulis, D. J. (1990a)** see Kläy, M. P. and D. J. Foulis (1990).
- Foulis, D. J., C. Piron, and C. H. Randall (1983)**, Realism, operationalism, and quantum mechanics, *Found. Phys.* **13**, 813–841. [564]

- Foulis, D. J. and C. H. Randall (1971)**, Lexicographic orthogonality, *J. Comb. Theory*, **11**, 157–162. [565]
- Foulis, D. J. and C. H. Randall (1971a)**, Conditioning maps on orthomodular lattices, *Glasgow Math. J.* **12**, 35–42. [566]
- Foulis, D. J. and C. H. Randall (1972)**, Operational statistics. I. Basic concepts, *J. Math. Phys.* **13**, 1667–1675. [567]
- Foulis, D. J. and C. H. Randall (1974)**, Empirical logic and quantum mechanics, *Synthese*, **29**, 81–111; Reprinted in **Suppes76**, 73–103. [568]
- Foulis, D. J. and C. H. Randall (1974a)**, The empirical logic approach to the physical sciences, in **Marburg73**, pp. 230–249. [569]
- Foulis, D. J. and C. H. Randall (1974b)**, The stability of pure weights under conditioning, *Glasgow Math. J.* **15**, 5–12. [570]
- Foulis, D. J. and C. H. Randall (1978)**, Manuals, morphisms, and quantum mechanics, in **Loyola77**, pp. 105–126. [571]
- Foulis, D. J. and C. H. Randall (1979)**, Tensor product of manuals — An alternative to tensor product of quantum logics, *Notices Am. Math. Soc.* **26**, A–558. [572]
- Foulis, D. J. and C. H. Randall (1981)**, What are quantum logics and what ought they to be?, in **Erice79**, pp. 35–52. [573]
- Foulis, D. J. and C. H. Randall (1981a)**, Empirical logics and tensor products, in **Marburg79**, pp. 9–20. [574]
- Foulis, D. J. and C. H. Randall (1983)**, A mathematical language for quantum physics, in Gruber, C., C. Piron, T. Minhtom, and R. Weil (eds.), *Les fondements de la mécanique quantique*, Association Vaudoise des chercheurs en physique, Montana (1983), pp. 193–222. [575]
- Foulis, D. J. and C. H. Randall (1984)**, A note on misunderstanding of Piron’s axioms for quantum mechanics, *Found. Phys.* **14**, 65–81. [576]
- Foulis, D. J. and C. H. Randall (1985)**, Dirac revisited, in **Joensuu85**, 97–112. [577]
- Fowler, M. (1979)**, Elementary counterexamples in infinite dimensional inner product spaces, *Math. Mag.* **52**, 96–97. [578]
- Fraassen, van, B. C.** see van Fraassen, B. C.
- Francia, Toraldo di, G.** see Toraldo di Francia, G.
- Franco, G. (1987)** see Cattaneo, G., G. Franco, and G. Marino (1987).
- Franke, V. A. (1980)**, An axiomatic scheme more general than quantum theory, *Rep. Math. Phys.* **18**, 411–431. [579]
- Fraser, G. A. (1976)**, The semilattice tensor product of distributive lattices, *Trans. Am. Math. Soc.* **217**, 183–194. [580]
- Frazer, P. (1981)** see Hardegree, G. and P. Frazer (1981).
- Frazer, P. J., D. J. Foulis, and C. H. Randall (1980)**, Weight functions on extensions of the compound manuals, *Glasgow Math. J.* **21**, 97–101. [581]
- Freese, R. (1980)**, Free modular lattices, *Trans. Am. Math. Soc.* **261**, 81–91. [582]
- Freese, R. and B. Jónsson (1976)**, Congruence modularity implies the Arguesian identity, *Algebra Universalis*, **6**, 225–228. [583]
- Frescura, F. A. M. and B. J. Hiley (1980)**, The implicate order, algebras, and the spinor, *Found. Phys.* **10**, 7–31. [584]

- Frescura, F. A. M. and B. J. Hiley (1980a)**, The algebraization of quantum mechanics and the implicate order, *Found. Phys.* **10**, 705–722. [585]
- Freyer, K. D. and I. Halperin (1954)**, Coordinates in geometry, *Trans. Roy. Soc. Canada*, **48**, 11–26. [586]
- Freyer, K. D. and I. Halperin (1954a)**, On the coordinatization theorem of J. von Neumann, *Canad. J. Math.* **7**, 432–444. [587]
- Freyer, K. D. and I. Halperin (1956)**, The von Neumann coordinatization theorem for complemented modular lattices, *Acta Sci. Math. Szeged.* **17**, 203–249. [588]
- Friedman, M. (1977)**, Book review (*Philosophical papers* by H. Putnam), *Phil. Rev.* **86**, 545–556. [589]
- Friedman, M. and C. Glymour (1972)**, If quanta had logic, *J. Phil. Logic*, **1**, 16–28. [590]
- Friedman, M. and H. Putnam (1978)**, Quantum logic, conditional probability, and interference, *Dialectica*, **32**, 305–315. [591]
- Frink Jr., O. (1947)**, Complemented modular lattices and projective spaces of infinite dimension, *Trans. Am. Math. Soc.* **60**, 425–467. [592]
- Fuchs, W. R. (1964)**, Ansätze zu einer Quantenlogik, *Theoria*, **30**, 137–140. [593]
- Galdi, G. P. (1979)** see Barone, F. and G. P. Galdi (1979).
- Gallone, F. (1973)** see Cirelli, R. and F. Gallone (1973).
- Gallone, F. and A. Maniá (1971)**, Group representation by automorphisms of a proposition system, *Ann. Inst. Henri Poincaré*, **15 A**, 37–59. [594]
- Gallone, F. and A. Zecca (1973)**, Quantum logic axioms and the proposition–state structure, *Int. J. Theor. Phys.* **8**, 51–63. [595]
- Gardner, M. R. (1971)**, Is quantum logic really logic?, *Phil. Sci.* **38**, 508–529. [596]
- Gardner, M. R. (1972)**, Two deviant logics for quantum theory: Bohr and Reichenbach, *Brit. J. Phil. Sci.* **23**, 89–109. [597]
- Gardner, M. R. (1972a)**, Quantum–theoretical realism: Popper and Einstein v. Kochen and Specker, *Brit. J. Phil. Sci.* **23**, 12–23. [598]
- Gardner, M. R. (1982)**, Predicting novel facts, *Brit. J. Phil. Sci.* **33**, 1–15. [599]
- Garola, C. (1980)**, Propositions and orthocomplementation in quantum logic, *Int. J. Theor. Phys.* **19**, 369–378. [600]
- Garola, C. (1985)**, Embedding of posets into lattices in quantum logic, *Int. J. Theor. Phys.* **24**, 423–433. [601]
- Garola, C. (1988)** see Cattaneo, G., C. Dalla Pozza, C. Garola, and G. Nisticò (1988).
- Garola, C. (1989)** see Cattaneo, G., C. Garola, and G. Nisticò (1989).
- Garola, C. (1990)**, An extended classical language for the foundation of quantum mechanics, in *Ján90*, pp. 57–63. [602]
- Garola, C. (1991)**, Classical foundations of quantum logic, *Int. J. Theor. Phys.* **30**, 1–52. [603]
- Garola, C. and L. Solombrino (1983)**, Yes–no experiments and ordered structures in quantum physics, *Nuovo Cim.* **77 B**, 87–110. [604]
- Gauthier, Y. (1983)**, Quantum mechanics and the local observer, *Int. J. Theor. Phys.* **22**, 1141–1152. [605]

- Gauthier, Y. (1985)**, A theory of local negation: the model and some applications, *Arch. Math. Logik Grundlag.* **25**, 127–143. [606]
- Gdańsk87** see Kostro, L. et al. (1988)
- Gdańsk89** see Mizerski, J. et al. (1990).
- Gensheimer, H. (1983)**, Measures on orthomodular lattices, in **Klagenfurt82**, 115–121. [607]
- Gensheimer, H. and G. Kalmbach (1985)**, Measures and dimension lattices, in **Cologne84**, pp. 285–290. [608]
- Georgacarakos, G. N. (1979)**, Orthomodularity and relevance, *J. Phil. Logic*, **8**, 415–432. [609]
- Georgacarakos, G. N. (1980)**, Equationally definable implication algebras for orthomodular lattices, *Studia Logica*, **39**, 5–18. [610]
- Gerelle, E. G. R. (1975)**, Representation of finite orthomodular posets, *Notices Am. Math. Soc.* **22**, A–54. [611]
- Gerelle, E. G. R. (1977)**, Selection maps for quantum logics: Applications to the classification of elementary particles, *Rep. Math. Phys.* **12**, 141–150. [612]
- Gerelle, E. G. R., R. J. Greechie, and F. R. Miller (1974)**, Weights on spaces, in Enz, C. P. and J. Mehra (eds.), *Physical reality and mathematical description*, D. Reidel, Dordrecht–Holland (1974), pp. 169–192. [613]
- Gerstberger, H., H. Neumann, and R. Werner (1981)**, Makroskopische Kausalität und relativistische Quantenmechanik, in **Nitsch, J., J. Pfarr, and E. -W. Stachow (1981)**, pp. 205–216. [614]
- Gibbins, P. (1981)**, A note on quantum logic and the uncertainty principle, *Phil. Sci.* **48**, 122. [615]
- Gibbins, P. (1981a)**, Putnam on the two-slit experiment, *Erkenntnis*, **16**, 235–241. [616]
- Gibbins, P. F. (1983)**, Quantum logic as sequent calculi, in **Salzburg83**, Vol. 4, pp. 73–74. [617]
- Gibbins, P. F. (1985)**, A user–friendly quantum logic, *Logique et Analyse*, **28**, 353–362. [618]
- Gibbins, P. F. (1987)**, *Particles and paradoxes: The limits of quantum logics*, Cambridge University Press, Cambridge. [619]
- Gibbins, P. F. and D. B. Pearson (1981)**, The distributive law in the two–slit experiment, *Found. Phys.* **11**, 797–803. [620]
- Giles, R. (1968)**, Foundations for quantum statistics, *J. Math. Phys.* **9**, 359–371. [621]
- Giles, R. (1970)**, Foundations for quantum mechanics, *J. Math. Phys.* **11**, 2139–2160; Reprinted in **Hooker79II**, pp. 277–322. [622]
- Giles, R. (1974)**, A non–classical logic for physics, *Studia Logica*, **33**, 397–415. [623]
- Giles, R. (1977)**, A non–classical logic for physics, in Wojcicky, R. (ed.), *Selected papers on Lukasiewicz sentential calculi*, Polish Academy of Science, Ossolineum (1977), pp. 13–51. [624]
- Giles, R. (1977a)**, A pragmatic approach to the formalization of empirical theories, in **Warsaw74**, pp. 113–135. [625]
- Giles, R. (1979)**, Formal languages and the foundations of physics, in **Hooker79**, pp. 19–87. [626]

- Giles, R. (1979a)**, The concept of a proposition in classical and quantum physics, *Studia Logica*, **38**, 337–353. [627]
- Giles, R. and H. Kummer (1971)**, A non-commutative generalization of topology, *Indiana Univ. Math. J.* **21**, 91–102. [628]
- Gisin, N. (1983)**, Irreversible quantum dynamics and the Hilbert space structure of quantum kinematics, *J. Math. Phys.* **24**, 1779–1782. [629]
- Gisin, N. (1984)**, Propensities and the state–property structure of classical and quantum systems, *J. Math. Phys.* **25**, 2260–2265. [630]
- Gisin, N. (1984a)**, Quantum measurements and stochastic processes, *Phys. Rev. Lett.* **52**, 1657–1660. [631]
- Gisin, N. (1984b)**, Gisin responds, *Phys. Rev. Lett.* **53**, 1776. [632]
- Gisin, N. (1986)**, The property lattice of spatially separated quantum systems, *Rep. Math. Phys.* **23**, 363–371. [633]
- Giuntini, R. (1987)**, Quantum logics and Lindenbaum property, *Studia Logica*, **46**, 17–35. [634]
- Giuntini, R. (1988)**, Quantum logics and relative Lindenbaum property, in C. Cellucci and G. Sambin (eds.), *Atti del Congresso: Temi e Prospettive della Logica e della Filosofia della Scienza Contemporanea, Vol. I*. CLUEB, Bologna (1988), pp. 189–202. [635]
- Giuntini, R. (1989)**, Lindenbaum property, quantum logics, and the hidden–variable issue, in Weingartner, P. and G. Schurz (eds.): *Philosophy of the natural sciences, Proceedings of the 13th International Wittgenstein–Symposium — 14th to 21st August 1988, Kirchberg am Wechsel, Austria, Selected papers*, Hölder–Pichler–Tempsky / Kluwer Academic Publishers, Wien / Norwell–MA–U.S.A. & Dordrecht–Holland (1989), pp. 128–136. [636]
- Giuntini, R. (1989a)** see Dalla Chiara, M. L. and R. Giuntini (1989).
- Giuntini, R. (1989b)**, Quantum logics and relative Lindenbaum property, *Ann. der Phys. 7. Folge*, **46**, 293–302. [637]
- Giuntini, R. (1989c)**, Quantum logics and Hilbert spaces, *Teoria*, **10**, 3–26. [638]
- Giuntini, R. (1990)**, Brouwer–Zadeh logic and the operational approach to quantum mechanics, *Found. Phys.* **20**, 701–714. [639]
- Giuntini, R. (1991)**, *Quantum logic and hidden variables*, Bibliographisches Institut, Mannheim. [640]
- Giuntini, R. (1991a)**, A semantical investigation on Brouwer–Zadeh logic, *J. Phil. Logic*, **20**, 411–433. [641]
- Giuntini, R. and H. Greuling (1989)**, Toward a formal language for unsharp properties, *Found. Phys.* **19**, 931–945. [642]
- Giuntini, R. and P. Mittelstaedt (1989)**, The Leibnitz principle in quantum logic, *Int. J. Theor. Phys.* **28**, 159–168. [643]
- Gleason, A. M. (1957)**, Measures on the closed subspaces of a Hilbert space, *J. Math. Phys.* **6**, 885–893; Reprinted in **Hooker75I**, pp. 123–133. [644]
- Glymour, C. (1976)**, Review of Bub’s *Interpretation of quantum mechanics*, *Canad. J. Phil.* **6**, 161–175. [645]
- Glymour, C. (1972)** see Friedman, M. and C. Glymour (1972).

- Godowski, R. (1979)**, Disjunctivity and orthodisjunctivity in orthomodular posets, *Demonstratio Math.* **12**, 1043–1049. [646]
- Godowski, R. (1980)**, Commutativity in orthomodular posets, *Rep. Math. Phys.* **18**, 347–351. [647]
- Godowski, R. (1981)**, Varieties of orthomodular lattices with a strongly full set of states, *Demonstratio Math.* **14**, 725–733. [648]
- Godowski, R. (1982)**, States on orthomodular lattices, *Demonstratio Math.* **15**, 817–822. [649]
- Godowski, R. (1987)**, Partial Greechie diagrams for modular ortholattices, *Demonstratio Math.* **20**, 291–297. [650]
- Godowski, R. and R. Greechie (1984)**, Some equations related to the states on orthomodular lattices, *Demonstratio Math.* **17**, 241–250. [651]
- Godowski, R. and M. Navara (1990)**, Implicative and disjunctive orthomodular posets, in **Ján90**, pp. 64–69. [652]
- Goldblatt, R. I. (1974)**, Semantic analysis of orthologic, *J. Phil. Logic*, **3**, 19–35. [653]
- Goldblatt, R. I. (1975)**, The Stone space of an ortholattice, *Bull. London Math. Soc.* **7**, 45–48. [654]
- Goldblatt, R. I. (1984)**, Orthomodularity is not elementary, *J. Symb. Logic*, **49**, 401–404. [655]
- Golden, S. (1957)**, A formal theory of quantum classification. I, *Nuovo Cim. Suppl.* **5**, 540–567. [656]
- Gorini, V. and A. Zecca (1975)**, Reversible dynamics in a proposition–state structure, *J. Math. Phys.* **16**, 667–669. [657]
- Grätzer, G. (1978)**, *Lattice theory (General theory)*, Akademie-Verlag, Berlin. [658]
- Grätzer, G., B. Jónsson, and H. Lakser (1973)**, The amalgamation property in equational classes of modular lattices, *Pacif. J. Math.* **45**, 507–524. [659]
- Graves, J. C. (1973)**, Review: *Cohen, R. S. and M. W. Wartofsky* [1969] (eds.): *Boston studies in the philosophy of science*, **5**, *Brit. J. Phil. Sci.* **24**, 183–190. [660]
- Graves, W. H. and S. A. Selesnick (1973)**, An extension of the Stone representation for orthomodular lattices, *Colloq. Math.* **27**, 21–30. [661]
- Greechie, R. J. (1964)**, A class of orthomodular nonmodular lattices, *Notices Am. Math. Soc.* **11**, 219. [662]
- Greechie, R. J. (1968)**, Hyper-irreducibility in an orthomodular lattice, *J. Natur. Sci. Math.* **8**, 108–111. [663]
- Greechie, R. J. (1968a)**, On the structure of orthomodular lattices satisfying the chain condition, *J. Comb. Theory*, **4**, 210–218. [664]
- Greechie, R. J. (1969)**, A particular non-atomistic orthomodular poset, *Commun. Math. Phys.* **14**, 326–328. [665]
- Greechie, R. J. (1969a)**, An orthomodular poset with a full set of states not embeddable in Hilbert space, *Caribbean J. Sci. Math.* **1**, 15–26. [666]
- Greechie, R. J. (1971)**, Orthomodular lattices admitting no states, *J. Comb. Theory*, **10 A**, 119–132. [667]

- Greechie, R. J. (1971a)**, Combinatorial quantum logic, in Kay, D. C. (ed.), *Proceedings on the conference on convexity and combinatorial geometry*, Norman: University of Oklahoma, Department of Mathematics. [668]
- Greechie, R. J. (1974)** see Gerelle, E. G. R., R. J. Greechie, and F. R. Miller (1974).
- Greechie, R. J. (1974a)** see Brown, J. and J. Greechie (1974).
- Greechie, R. J. (1974b)**, Some results from the combinatorial approach to quantum logic, *Synthese*, **29**, 113–127; Reprinted in **Suppes76**, pp. 105–119. [669]
- Greechie, R. J. (1975)** see Haskins, L., S. Gudder, and R. Greechie (1975).
- Greechie, R. J. (1975a)**, On three dimensional quantum proposition systems, in **Feldafing74**, pp. 71–83. [670]
- Greechie, R. J. (1977)**, On generating distributive sublattices of orthomodular lattices, *Proc. Am. Math. Soc.* **67**, 17–22. [671]
- Greechie, R. J. (1977a)**, Any complete atomic orthomodular lattice with countably many atoms is a sublattice of one generated by three elements, *J. Natur. Sci. Math.* **17**, 33–41. [672]
- Greechie, R. J. (1978)**, Finite groups as automorphism groups of orthocomplemented projective planes, *J. Austral. Math. Soc. A* **25**, 19–24. [673]
- Greechie, R. J. (1978a)**, Another nonstandard quantum logic (and how I found it), in **Loyola77**, pp. 71–85. [674]
- Greechie, R. J. (1979)**, An addendum to “On generating distributive sublattices of orthomodular lattices,” *Proc. Am. Math. Soc.* **76**, 216–218. [675]
- Greechie, R. J. (1981)**, A non-standard quantum logic with a strong set of states, in **Erice79**, 375–380. [676]
- Greechie, R. J. (1982)** see Gudder, S. P., G. T. Rüttimann, and R. J. Greechie (1982).
- Greechie, R. J. (1982a,82b)** see Bruns, G. and R. Greechie (1982,82a).
- Greechie, R. J. (1984)** see Godowski, R. and R. Greechie (1984).
- Greechie, R. J. (1990)**, Sites and tours in orthoalgebras and orthomodular lattices, *Found. Phys.* **20**, 915–923. [677]
- Greechie, R. J. (1990a)** see Bruns, G. and R. Greechie (1990).
- Greechie, R. J. and S. P. Gudder (1971)**, Is quantum logic a logic?, *Helv. Phys. Acta*, **44**, 238–240. [678]
- Greechie, R. J. and S. P. Gudder (1973)**, Quantum logics, in **Ontario71**, pp. 143–173; Reprinted in **Hooker75I**, pp. 545–575. [679]
- Greechie, R. J. and L. Herman (1985)**, Commutator finite orthomodular lattices, *Order*, **1**, 277–284. [680]
- Greechie, R. J. and L. Herman (1990)**, Quasi-atoms in symmetric orthomodular lattices, *Algebra Universalis*, **27**, 455–465. [681]
- Greuling, H. (1989)** see Giuntini, R. and H. Greuling (1989).
- Grgin, E. and A. Petersen (1972)**, Classical and quantum mechanics in auxiliary algebras, *Phys. Rev. D* **5**, 300–306. [682]
- Grgin, E. and A. Petersen (1972a)**, Relation between classical and quantum mechanics, *Int. J. Theor. Phys.* **6**, 325–337. [683]
- Grib, A. A. and R. R. Zapatrin (1990)**, Automata simulating quantum logic, *Int. J. Theor. Phys.* **29**, 113–123. [684]

- Gross, H. (1977)**, Isomorphisms between lattices of linear subspaces which are induced by isometries, *J. Algebra*, **49**, 537–546. [685]
- Gross, H. (1979)**, *Quadratic forms in infinite dimensional vector spaces*, Birkhäuser, Basel. [686]
- Gross, H. (1982)**, The lattice method in the theory of quadratic spaces of nondenumerable dimensions, *J. Algebra*, **75**, 23–42. [687]
- Gross, H. (1985)**, Quadratic forms and Hilbert lattices, in **Vienna84**, 181–190. [688]
- Gross, H. (1987)**, Different orthomodular orthocomplementations on a lattice, *Order*, **4**, 79–92. [689]
- Gross, H. (1989)**, Hilbert lattices with the extension property, *Geometriae Dedicata*, **29**, 153–161. [690]
- Gross, H. (1989a)**, On orthomodular lattices. Contributions to general algebra, in *Proceedings of the Krems Conference, August 21–27, 1988*, North Holland/Elsevir, Amsterdam. [691]
- Gross, H. (1990)**, Hilbert lattices: New results and unsolved problems, *Found. Phys.* **20**, 529–559. [692]
- Gross, H. and H. A. Keller (1977)**, On the definition of Hilbert space, *Manuscripta Math.* **23**, 67–90. [693]
- Gross, H. and H. A. Keller (1981)**, On the non–trace–valued forms, *Advances in Math.* **42**, 179–195. [694]
- Gross, H. and H. A. Keller (1983)**, On the problem of classifying infinite chains in projective and orthogonal geometry, *Ann. Sci. Fennicae, Ser. A, I.* **8**, 67–86. [695]
- Gross, H. and U.-M. Künzi (1985)**, On a class of orthomodular quadratic spaces, *L'Enseignement Mathématique*, **31**, 187–212. [696]
- Gross, H., Z. Lomecky, and R. Schuppli (1985)**, Lattice problems originating in quadratic space theory, *Algebra Universalis*, **20**, 267–291. [697]
- Grubb, A. (1984)** see Nicholson, G. E., A. Grubb, and C. S. Sharma (1984).
- Gudder, S. P. (1965)**, Spectral methods for a generalized probability theory, *Trans. Am. Math. Soc.* **119**, 428–442. [698]
- Gudder, S. P. (1966)**, Uniqueness and existence properties of bounded observables, *Pacif. J. Math.* **19**, 81–93. [699]
- Gudder, S. (1967)**, Coordinate and momentum observables in axiomatic quantum mechanics, *J. Math. Phys.* **8**, 1848–1858. [700]
- Gudder, S. (1967a)**, System of observables in axiomatic quantum mechanics, *J. Math. Phys.* **8**, 2109–2113. [701]
- Gudder, S. (1967b)**, Hilbert space, independence, and generalized probability, *J. Math. Anal. Appl.* **20**, 48–61. [702]
- Gudder, S. (1968)**, Hidden variables in quantum mechanics reconsidered, *Rev. Mod. Phys.* **40**, 229–231. [703]
- Gudder, S. (1968a)**, Dispersion–free states and the exclusion of hidden observables, *Proc. Am. Math. Soc.* **19**, 319–324. [704]
- Gudder, S. (1968b)**, Joint distribution of observables, *J. Math. Mech.* **18**, 325–335. [705]
- Gudder, S. P. (1968c)**, Complete sets of observables and pure states, *Canad. J. Math.* **20**, 1276–1280. [706]

- Gudder, S. (1969)**, On the quantum logic approach to quantum mechanics, *Commun. Math. Phys.* **12**, 1–15. [707]
- Gudder, S. P. (1969a)**, Quantum probability spaces, *Proc. Am. Math. Soc.* **21**, 296–302. [708]
- Gudder, S. P. (1969b)**, Coordinatization of orthomodular posets, *Notices Am. Math. Soc.* **16**, 190. [709]
- Gudder, S. P. (1969c)**, A note on proposition observables, *Pacif. J. Math.* **28**, 101–104. [710]
- Gudder, S. (1970)**, On hidden-variable theories, *J. Math. Phys.* **11**, 431–436. [711]
- Gudder, S. (1970a)**, A superposition principle in physics, *J. Math. Phys.* **11**, 1037–1040. [712]
- Gudder, S. (1970b)**, Axiomatic quantum mechanics and generalized probability theory, in Bharucha–Reid, A. T. (ed.), *Probabilistic methods in applied mathematics*, Vol. 2, Academic Press, New York (1970), pp. 53–129. [713]
- Gudder, S. P. (1970c)**, Projective representation of quantum logic, *Int. J. Theor. Phys.* **3**, 99–108. [714]
- Gudder, S. P. (1971)** see Greechie, R. J. and S. P. Gudder (1971).
- Gudder, S. (1971a)** see Haskins, L. and S. Gudder (1971).
- Gudder, S. P. (1971b)**, Representations of groups as automorphisms on orthomodular lattices and posets, *Canad. J. Math.* **23**, 659–673; Reprinted in **Hooker79II**, pp. 31–47. [715]
- Gudder, S. (1972)**, Hidden-variable model for quantum mechanics, *Nuovo Cim.* **10 B**, 518–522. [716]
- Gudder, S. (1972a)**, Plane frame functions and pure states in Hilbert space, *Int. J. Theor. Phys.* **6**, 369–375. [717]
- Gudder, S. (1972b)**, Partial algebraic structures associated with orthomodular posets, *Pacif. J. Math.* **41**, 717–729. [718]
- Gudder, S. (1973)**, Generalized measure theory, *Found. Phys.* **3**, 399–411. [719]
- Gudder, S. (1973a)**, Convex structures and operational quantum mechanics, *Commun. Math. Phys.* **29**, 249–264. [720]
- Gudder, S. (1973b)**, State automorphism in axiomatic quantum mechanics, *Int. J. Theor. Phys.* **7**, 205–211. [721]
- Gudder, S. P. (1973c)**, Quantum logics, physical space, position observables, and symmetry, *Rep. Math. Phys.* **4**, 193–202. [722]
- Gudder, S. P. (1973d)** see Greechie, R. J. and S. P. Gudder (1973).
- Gudder, S. P. (1974)** see Cornette, W. M. and S. P. Gudder (1974).
- Gudder, S. (1974a)**, Inner product spaces, *Am. Math. Monthly*, **81**, 29–36. [723]
- Gudder, S. (1974b)**, A transient quantum effect, *Found. Phys.* **4**, 413–416. [724]
- Gudder, S. (1975)**, Correction to: “Inner product spaces”, *Am. Math. Monthly*, **82**, 251–252. [725]
- Gudder, S. (1975a)** see Haskins, L., S. Gudder, and R. Greechie (1975).
- Gudder, S. (1975b)** see Strawther, D. and S. P. Gudder (1975).
- Gudder, S. (1976)**, A generalized measure and probability theory for the physical sciences, in **Ontario73III**, pp. 121–141. [726]

- Gudder, S. P. (1977), Convexity and mixtures, *SIAM Rev.* **19**, 221–240. [727]
- Gudder, S. P. (1977a), Four approaches to axiomatic quantum mechanics, in Price, W. C. and S. S. Chissick (eds.), *The uncertainty principle and foundations of quantum mechanics: A fifty years' survey*, John Wiley & Sons, New York (1977), pp. 247–276. [728]
- Gudder, S. P. (1978), Some unsolved problems in quantum logics, in **Loyola77**, pp. 87–103. [729]
- Gudder, S. P. (1978a), Cantoni's generalized transition probability, *Commun. Math. Phys.* **63**, 265–267. [730]
- Gudder, S. P. (1978b), Gaussian random fields, *Found. Phys.* **8**, 295–302. [731]
- Gudder, S. P. (1979), A survey of axiomatic quantum mechanics, in **Hooker79II**, pp. 323–363. [732]
- Gudder, S. P. (1979a), Axiomatic operational quantum mechanics, *Rep. Math. Phys.* **16**, 147–166. [733]
- Gudder, S. P. (1979b), *Stochastic methods in quantum mechanics*, North-Holland, Amsterdam. [734]
- Gudder, S. P. (1979c), Families of completely positive mappings, *Int. J. Theor. Phys.* **18**, 935–944. [735]
- Gudder, S. P. (1979d), A Radon–Nikodym theorem for $*$ -algebras, *Pacif. J. Math.* **80**, 141–149. [736]
- Gudder, S. P. (1979e), Algebraic conditions for a function on an Abelian group, *Lett. Math. Phys.* **3**, 127–133. [737]
- Gudder, S. (1980), Proposed test for a hidden variable theory, *Int. J. Theor. Phys.* **19**, 163–168. [738]
- Gudder, S. P. (1980a), Statistical inference in quantum mechanics, *Rep. Math. Phys.* **17**, 265–274. [739]
- Gudder, S. P. (1981), Expectation and transitional probability, *Int. J. Theor. Phys.* **20**, 383–395. [740]
- Gudder, S. P. (1981a), Measure and integration in quantum set theory, in **Erice79**, pp. 341–352. [741]
- Gudder, S. P. (1981b), Representations of Baer $*$ -semigroups and quantum logics in Hilbert space, in **Erice79**, pp. 265–273. [742]
- Gudder, S. P. (1981c), Comparison of the quantum logic, convexity, and algebraic approaches to quantum mechanics, in **Marburg79**, pp. 125–131. [743]
- Gudder, S. P. (1982), A logical explanation for quarks, *Found. Phys.* **12**, 419–431. [744]
- Gudder, S. P. (1982a), A survey of a quark model, *Found. Phys.* **12**, 1041–1055. [745]
- Gudder, S. P. (1982b), Hilbertian interpretations of manuals, *Proc. Am. Math. Soc.* **85**, 251–255. [746]
- Gudder, S. P. (1983), An approach to measurement, *Found. Phys.* **13**, 35–49. [747]
- Gudder, S. P. (1983a), The Hilbert space axiom in quantum mechanics, in **van der Merwe, A. (1983)**, pp. 109–127. [748]
- Gudder, S. P. (1983b), A finite dimensional quark model, *Int. J. Theor. Phys.* **22**, 947–970. [749]
- Gudder, S. P. (1984), Finite quantum processes, *J. Math. Phys.* **25**, 456–465. [750]

- Gudder, S. P. (1984a)**, Reality, locality, and probability, *Found. Phys.* **14**, 997–1010. [751]
- Gudder, S. P. (1984b)**, An extension of classical measure theory, *SIAM Rev.* **26**, 71–89. [752]
- Gudder, S. P. (1984c)**, Probability manifolds, *J. Math. Phys.* **25**, 2397–2401. [753]
- Gudder, S. P. (1984d)**, Wave–particle duality in a quark model, in Diner, S., D. Fargue, G. Lochak, and F. Selleri (eds.), *The wave–particle dualism. A tribute to Luis de Broglie on his 90th birthday*, D. Reidel, Dordrecht–Holland (1984), pp. 499–513. [754]
- Gudder, S. P. (1985)**, Measures and states on graphs, in **Cologne84**, 253–264. [755]
- Gudder, S. P. (1985a)**, Linearity of expectation functionals, *Found. Phys.* **15**, 101–111. [756]
- Gudder, S. P. (1985b)**, Amplitude phase–space model for quantum mechanics, *Int. J. Theor. Phys.* **24**, 343–353. [757]
- Gudder, S. P. (1985c)**, Finite dimensional relativistic quantum mechanics, *Int. J. Theor. Phys.* **24**, 707–721. [758]
- Gudder, S. P. (1985d)** see Zerbe, J. and S. P. Gudder (1985).
- Gudder, S. P. (1986)**, Discrete quantum mechanics, *J. Math. Phys.* **27**, 1782–1790. [759]
- Gudder, S. P. (1986a)**, Quantum graphics, *Int. J. Theor. Phys.* **25**, 807–824. [760]
- Gudder, S. P. (1986b)**, State dimension of a graph, *Demonstratio Math.* **19**, 947–975. [761]
- Gudder, S. P. (1986c)**, Partial Hilbert spaces and amplitude functions, *Ann. Inst. Henri Poincaré*, **45 A**, 311–326. [762]
- Gudder, S. P. (1986d)**, Logical cover spaces, *Ann. Inst. Henri Poincaré*, **45 A**, 327–337. [763]
- Gudder, S. (1987)** see Pulmannová, S. and S. Gudder (1987).
- Gudder, S. (1987a)**, A functional equation for transition amplitudes, *Aequationes Mathematicae*, **32**, 107–108. [764]
- Gudder, S. P. (1988)**, A theory of amplitudes, *J. Math. Phys.* **29**, 2020–2035. [765]
- Gudder, S. P. (1988a)**, Quantum graphic dynamics, *Found. Phys.* **18**, 751–756. [766]
- Gudder, S. P. (1988b)**, Realistic quantum probability, *Int. J. Theor. Phys.* **27**, 193–209. [767]
- Gudder, S. P. (1988c)**, Finite model for particles, *Hadronic J.* **11**, 21–34. [768]
- Gudder, S. P. (1988d)**, *Quantum probability*, Academic Press, Boston. [769]
- Gudder, S. P. (1989)**, Particle decay model, *Int. J. Theor. Phys.* **28**, 273–301. [770]
- Gudder, S. P. (1989a)**, Predictions of a particle model, *Int. J. Theor. Phys.* **28**, 1341–1350. [771]
- Gudder, S. P. (1989b)**, Realism in quantum mechanics, *Found. Phys.* **19**, 949–970. [772]
- Gudder, S. P. (1989c)**, Book review: *Quantum probability — Quantum logic* by I. Pitowsky, *Found. Phys. Lett.* **2**, 297–298. [773]
- Gudder, S. P. (1989d)**, Book review: *An introduction to Hilbert space and quantum logic* by W. Cohen, *Found. Phys. Lett.* **2**, 503–504. [774]
- Gudder, S. (1989e,90)** see Marbeau, J. and S. Gudder (1989,90).
- Gudder, S. P. (1990a)** see Tomé, W. and S. Gudder (1990).

- Gudder, S. P. (1990b)**, Quantum probability and operational statistics, *Found. Phys.* **20**, 499–527. [775]
- Gudder, S. P. (1990c)**, Quantum stochastic processes, *Found. Phys.* **20**, 1345–1363. [776]
- Gudder, S. and T. Armstrong (1985)**, Bayes' rule and hidden variables, *Found. Phys.* **15**, 1009–1017. [777]
- Gudder, S. P. and S. Boyce (1970)**, A comparison of the Mackey and Segal models for quantum mechanics, *Int. J. Theor. Phys.* **3**, 7–21. [778]
- Gudder, S. P. and L. Haskins (1974)**, The center of a poset, *Pacif. J. Math.* **52**, 85–89. [779]
- Gudder, S. and S. Holland (1975)**, Second correction to: “Inner product spaces”, *Am. Math. Monthly*, **82**, 818. [780]
- Gudder, S. P. and R. L. Hudson (1978)**, A noncommutative probability theory, *Trans. Am. Math. Soc.* **245**, 1–41. [781]
- Gudder, S. P., M. P. Kläy, and G. T. Rüttimann (1986)**, States on hypergraphs, *Demonstratio Math.* **19**, 503–526. [782]
- Gudder, S. and J.-P. Marchand (1972)**, Noncommutative probability on von Neumann algebras, *J. Math. Phys.* **13**, 799–806. [783]
- Gudder, S. and J.-P. Marchand (1977)**, Conditional expectations on von Neumann algebras: A new approach, *Rep. Math. Phys.* **12**, 317–329. [784]
- Gudder, S. and J.-P. Marchand (1980)**, A coarse-grained measure theory, *Bull. Acad. Polon. Sci., Sér. Sci. Math. Astr. et Phys.* **23**, 557–563. [785]
- Gudder, S. P. and J. R. Michel (1979)**, Embedding quantum logics in Hilbert space, *Lett. Math. Phys.* **3**, 379–386. [786]
- Gudder, S. P. and J. R. Michel (1981)**, Representation of Baer $*$ -semigroups, *Proc. Am. Math. Soc.* **81**, 157–163. [787]
- Gudder, S. P. and H. C. Mullikin (1973)**, Measure theoretic convergence of observables and operators, *J. Math. Phys.* **14**, 234–242. [788]
- Gudder, S. and V. Naroditsky (1981)**, Finite-dimensional quantum mechanics, *Int. J. Theor. Phys.* **20**, 614–643. [789]
- Gudder, S. and C. Piron (1971)**, Observables and the field in quantum mechanics, *J. Math. Phys.* **12**, 1583–1588. [790]
- Gudder, S. and S. Pulmannová (1987)**, Transition amplitude spaces, *J. Math. Phys.* **28**, 376–385. [791]
- Gudder, S. P. and G. T. Rüttimann (1986)**, Observables on hypergraphs, *Found. Phys.* **16**, 773–790. [792]
- Gudder, S. P. and G. T. Rüttimann (1988)**, Finite function spaces and measures on hypergraphs, *Discrete Math.* **68**, 221–244. [793]
- Gudder, S. P. and G. T. Rüttimann (1988a)**, Positive sets in finite linear function spaces, *Discrete Math.* **68**, 245–255. [794]
- Gudder, S. P., G. T. Rüttimann, and R. J. Greechie (1982)**, Measurements, Hilbert space, and quantum logic, *J. Math. Phys.* **23**, 2381–2386. [795]
- Gudder, S. P. and R. H. Schelp (1970)**, Coordinatization of orthocomplemented and orthomodular posets, *Proc. Am. Math. Soc.* **25**, 229–237. [796]

- Gudder, S. P. and C. Schindler (1990)**, Regular quantum Markov processes, *J. Math. Phys.* (to appear). [797]
- Gudder, S. P. and D. Strawther (1974)**, Orthogonality and nonlinear functionals, *Bull. Am. Math. Soc.* **80**, 946–950. [798]
- Gudder, S. P. and D. Strawther (1975)**, Orthogonally additive and orthogonally monotone functions on vector spaces, *Pacif. J. Math.* **58**, 427–436. [799]
- Gudder, S. and N. Zanghí (1984)**, Probability models, *Nuovo Cim.* **79 B**, 291–300. [800]
- Gudder, S. and J. Zerbe (1981)**, Generalized monotone convergence and Radon–Nikodym theorems, *J. Math. Phys.* **22**, 2553–2561. [801]
- Guenin, M. (1961)** see Stueckelberg, E. C. G., M. Guenin, C. Piron, and H. Ruegg (1961).
- Guenin, M. (1961a, 62, 62a)** see Stueckelberg, E. C. G. and M. Guenin (1961, 62, 62a).
- Guenin, M. (1966)**, Axiomatic foundations of quantum theories, *J. Math. Phys.* **7**, 271–282. [802]
- Gunson, J. (1967)**, On the algebraic structure of quantum mechanics, *Commun. Math. Phys.* **6**, 262–285. [803]
- Gunson, J. (1972)**, Physical states on quantum logics. I, *Ann. Inst. Henri Poincaré*, **17 A**, 295–311. [804]
- Gutkowski, D. and M. V. Valdes Franco (1983)**, On the quantum mechanical superposition of macroscopically distinguishable states, *Found. Phys.* **13**, 963–986. [805]
- Guz, W. (1971)**, Quantum logic and a theorem on commensurability, *Rep. Math. Phys.* **2**, 53–61. [806]
- Guz, W. (1974)**, On the axiom system for non-relativistic quantum mechanics, *Rep. Math. Phys.* **6**, 445–454. [807]
- Guz, W. (1974a)**, On quantum dynamical semigroups, *Rep. Math. Phys.* **6**, 455–464. [808]
- Guz, W. (1975)**, A modification of the axiom system of quantum mechanics, *Rep. Math. Phys.* **7**, 313–320. [809]
- Guz, W. (1975a)**, Markovian processes in classical and quantum mechanics, *Rep. Math. Phys.* **7**, 205–214. [810]
- Guz, W. (1975b)**, On time evolution of non-isolated physical systems, *Rep. Math. Phys.* **8**, 49–59. [811]
- Guz, W. (1977)**, Axioms for nonrelativistic quantum mechanics, *Int. J. Theor. Phys.* **16**, 299–306. [812]
- Guz, W. (1977a)**, Axioms for statistical physical theories and GL-spaces, *Rep. Math. Phys.* **12**, 151–167. [813]
- Guz, W. (1977b)**, Spaces of the type GM and GL. Basic properties, *Rep. Math. Phys.* **12**, 285–299. [814]
- Guz, W. (1978)**, On the simultaneous verifiability of yes–no measurements, *Int. J. Theor. Phys.* **17**, 543–548. [815]
- Guz, W. (1978a)**, On the lattice structure of quantum logics, *Ann. Inst. Henri Poincaré*, **28 A**, 1–7. [816]
- Guz, W. (1978b)**, Filter theory and covering law, *Ann. Inst. Henri Poincaré*, **29 A**, 357–378. [817]

- Guz, W. (1979)**, Pure operations and the covering law, *Rep. Math. Phys.* **16**, 125–141. [818]
- Guz, W. (1979a)**, An improved formulation of axioms for quantum mechanics, *Ann. Inst. Henri Poincaré*, **30 A**, 223–230. [819]
- Guz, W. (1980)**, A non-symmetric transition probability in quantum mechanics, *Rep. Math. Phys.* **17**, 385–400. [820]
- Guz, W. (1980a)**, Event-phase-space structure: An alternative to quantum logic, *J. Phys.* **A 13**, 881–899. [821]
- Guz, W. (1980b)**, Conditional probability in quantum mechanics, *Ann. Inst. Henri Poincaré*, **33 A**, 63–119. [822]
- Guz, W. (1981)**, Projection postulate and superposition principle in non-lattice quantum logics, *Ann. Inst. Henri Poincaré*, **34 A**, 373–389. [823]
- Guz, W. (1981a)**, Conditional probability and the axiomatic structure of quantum mechanics, *Fortschr. Phys.* **29**, 345–379. [824]
- Guz, W. (1984)**, Stochastic phase spaces, fuzzy sets, and statistical metric spaces, *Found. Phys.* **14**, 821–848. [825]
- Guz, W. (1985)**, Fuzzy σ -algebras of physics, *Int. J. Theor. Phys.* **24**, 481–493. [826]
- Guz, W. (1985a)**, On the nonclassical character of the phase-space representations of quantum mechanics, *Found. Phys.* **15**, 121–128. [827]
- Haack, S. (1974)**, *Deviant logic*, Cambridge University Press, Cambridge. [828]
- Haag, R. (1990)**, Fundamental irreversibility and the concept of events, *Commun. Math. Phys.* **132**, 245–251. [829]
- Haag, R. and U. Bannier (1978)**, Comments on Mielnik's generalized (non linear) quantum mechanics, *Commun. Math. Phys.* **60**, 1–6. [830]
- Hadjisavvas, N. (1981)** see Thieffine, F., N. Hadjisavvas, and M. Mugur-Schächter (1981).
- Hadjisavvas, N. (1981a)**, Distance between states and statistical inference in quantum theory, *Ann. Inst. Henri Poincaré*, **35 A**, 287–309. [831]
- Hadjisavvas, N. (1981b)**, Properties of mixtures on non-orthogonal states, *Lett. Math. Phys.* **5**, 327–332. [832]
- Hadjisavvas, N. (1982)**, On Cantoni's generalized transition probability, *Commun. Math. Phys.* **83**, 43–48. [833]
- Hadjisavvas, N. and F. Thieffine (1984)**, Piron's axioms for quantum mechanics: A reply to Foulis and Randall, *Found. Phys.* **14**, 83–88. [834]
- Hadjisavvas, N., F. Thieffine, and M. Mugur-Schächter (1980)**, Study of Piron's system of questions and propositions, *Found. Phys.* **10**, 751–765. [835]
- Hadjisavvas, N., F. Thieffine, and M. Mugur-Schächter (1981)**, Critical remark on Jauch's program, *Lett. Nuovo Cim.* **30**, 530–532. [836]
- Haiman, M. (1985)**, Two notes on the Arguesian identity, *Algebra Universalis*, **21**, 167–171. [837]
- Hall, M. J. W. (1988)**, Probability and logical structure of statistical theories, *Int. J. Theor. Phys.* **27**, 1285–1312. [838]
- Hallett, M. (1982)** see Bell, J. L. and M. Hallett (1982).
- Halperin, I. (1954,54a,56)** see Freyer, K. D. and I. Halperin (1954,54a,56).

- Halperin, I. (1985)**, *Books in review: A survey of John von Neumann's books on continuous geometry*, *Order*, **1**, 301–305. [839]
- Hamhalter, J. (1988)**, On the lattice of closed subspaces in topological linear space, in **Ján88**, pp. 37–39/40. [840]
- Hamhalter, J. (1989)**, The sums of closed subspaces in a topological linear space, *Acta Univ. Carolin. — Math. Phys.* **30**, No. 2, 61–64. [841]
- Hamhalter, J. (1989a)**, On modular spaces, *Bull. Polish Acad. Sci. Math.* **37**, 647–653. [842]
- Hamhalter, J. (1990)**, A representation of finitely-modular AC-lattices, *Math. Nachr.* **147**, 335–338. [843]
- Hamhalter, J. (1990a)**, States on W^* -algebras and orthogonal vector measures, *Proc. Am. Math. Soc.* **110**, 803–806. [844]
- Hamhalter, J. (1990b)**, Orthogonal vector measures on projection lattices in a Hilbert space, *Comment. Math. Univ. Carolin.* **31**, 655–660. [845]
- Hamhalter, J. (1990c)**, Orthogonal vector measures, in **Ján90**, pp. 74–78. [846]
- Hamhalter, J. and P. Pták (1987)**, A completeness criterion for inner product spaces, *Bull. London Math. Soc.* **19**, 259–263. [847]
- Hardegree, G. M. (1974)**, The conditional in quantum logic, *Synthese*, **29**, 63–80; Reprinted in **Suppes76**, pp. 55–72. [848]
- Hardegree, G. M. (1975)**, Stalnaker conditionals and quantum logics, *J. Phil. Logic*, **4**, 399–421. [849]
- Hardegree, G. M. (1975a)**, Quasi-implicative lattices and the logic of quantum mechanics, *Z. Naturforsch.* **30 a**, 1347–1360. [850]
- Hardegree, G. M. (1975b)**, Compatibility and relative compatibility in quantum mechanics, in *Abstracts of the 5th International Congress on Logic, Methodology, and Philosophy of Science*, [London, Canada, Aug. 27 – Sept. 4, 1975], Part. 7, pp. 23–24. [851]
- Hardegree, G. M. (1977)**, The modal interpretation of quantum mechanics, in **PSA76**, Vol. 1, pp. 82–103. [852]
- Hardegree, G. M. (1977a)**, Relative compatibility in conventional quantum mechanics, *Found. Phys.* **7**, 495–510. [853]
- Hardegree, G. M. (1977b)**, Reichenbach and the logic of quantum mechanics, *Synthese*, **35**, 3–40. [854]
- Hardegree, G. M. (1979)**, The conditional in abstract and concrete quantum logic, in **Hooker79II**, pp. 49–108. [855]
- Hardegree, G. M. (1979a)**, Reichenbach and the logic of quantum mechanics, in Salmon, W. C. (ed.), *Hans Reichenbach: Logical empiricist*, Reidel, Dordrecht–Holland (1979), pp. 475–512. [856]
- Hardegree, G. M. (1980)**, Micro-states in the interpretation of quantum theory, in **PSA80**, Vol. I, pp. 43–54. [857]
- Hardegree, G. M. (1981)**, An axiomatic system for orthomodular quantum logic, *Studia Logica*, **40**, 1–12. [858]
- Hardegree, G. M. (1981a)**, Material implication in orthomodular (and Boolean) lattices, *Notre Dame J. Formal Logic*, **22**, 163–183. [859]

- Hardegree, G. M. (1981b)**, Quasi-implication algebras, Part I: Elementary theory, *Algebra Universalis*, **12**, 30–47. [860]
- Hardegree, G. M. (1981c)**, Quasi-implication algebras, Part II: Structure theory, *Algebra Universalis*, **12**, 48–65. [861]
- Hardegree, G. M. (1981d)**, Some problems and methods in formal quantum logic, in *Erice79*, pp. 209–225. [862]
- Hardegree, G. M. (1985,85a)** see Lock, P. F. and S. P. Hardegree (1985,85a).
- Hardegree, G. M. and P. Frazer (1981)**, Charting the labyrinth of quantum logics, in *Erice79*, pp. 35–52. [863]
- Harding, J. (1988)**, Boolean factors of orthomodular lattices, *Algebra Universalis*, **25**, 281–282. [864]
- Harman, B. (1985)**, Maximal ergodic theorem on a logic, *Math. Slovaca*, **35**, 381–386. [865]
- Harper, W. L. and C. A. Hooker (1976)**(eds.), *Foundations of probability theory, statistical inference, and statistical theories of science, Proceedings of an international research colloquium held at the University of Western Ontario*, London, Canada, 10–13 May 1973, Volume **I**. *Foundations and philosophy of epistemic applications of probability theory*, Volume **II**. *Foundations and philosophy of statistical inference*, Volume **III**. *Foundations and philosophy of statistical theories in the physical sciences*, [The University of Western Ontario Series in the Philosophy of Science, Volume 6], D. Reidel, Dordrecht-Holland. [866]
- Hartkämper, A. and H. Neumann (1974)** (eds.), *Foundations of quantum mechanics and ordered linear spaces, Advanced Study Inst. Marburg1973*, Lecture Notes in Physics, Vol. 29, Springer, New York. [867]
- Hartkämper, A. and H. J. Schmidt (1983)**, On the foundations of the physical probability concept, *Found. Phys.* **13**, 655–672. [868]
- Haskins, L. (1974)** see Gudder, S. P. and L. Haskins (1974).
- Haskins, L. and S. Gudder (1971)**, Semimodular posets and the Jordan–Dedekind chain condition, *Proc. Am. Math. Soc.* **28**, 395–396. [869]
- Haskins, L., S. Gudder, and R. Greechie (1975)**, Perspectivity in semimodular orthomodular posets, *J. London Math. Soc.* **9**, 495–500. [870]
- Havrdá, J. (1982)**, Independence in a set with orthogonality, *Čas. Pěst. Mat.* **107**, 267–272. [871]
- Havrdá, J. (1987)**, Projection and covering in a set with orthogonality, *Čas. Pěst. Mat.* **112**, 245–248. [872]
- Havrdá, J. (1987a)**, A study of independence in a set with orthogonality, *Čas. Pěst. Mat.* **112**, 249–256. [873]
- Havrdá, J. (1989)**, On a certain mapping on the set with orthogonality, *Čas. Pěst. Mat.* **114**, 160–164. [874]
- Healey, R. (1979)**, Quantum realism; Naïveté is no excuse, *Synthese*, **42**, 121–144. [875]
- Healey, R. (1981)** (ed.), *Reduction, time, and reality. Studies in the philosophy of the natural sciences*, Cambridge University Press, Cambridge. [876]
- Heelan, P. A. (1970)**, Complementarity, context dependence, and quantum logic, *Found. Phys.* **1**, 95–100; Reprinted in *Hooker79II*, pp. 161–181. [878]

- Heelan, P. A. (1970a)**, Quantum and classical logic: Their respective roles, *Synthese*, **21**, 2–23. reprinted in **Cohen, R. S. and M. W. Wartofsky (1974)**, pp. 318–349. [879]
- Heelan, P. A. (1971)**, The logic of framework transpositions, *Int. Phil. Quarterly*, **11**, 314–334. [880]
- Hein, C. A. (1979)**, Entropy in operational statistics and quantum logic, *Found. Phys.* **9**, 751–786. [882]
- Hellman, G. (1980)**, Quantum logic and meaning, in **PSA80, Vol. II**, pp. 493–511. [883]
- Hellman, G. (1981)**, Quantum logic and the projection postulate, *Phil. Sci.* **48**, 469–486. [884]
- Hellwig, K.-E. (1969)**, Coexistent effects in quantum mechanics, *Int. J. Theor. Phys.* **2**, 147–155. [885]
- Hellwig, K.-E. (1981)**, Conditional expectation and duals of instruments, in **Marburg79**, pp. 113–124. [886]
- Hellwig, K.-E. and K. Kraus (1969)**, Pure operations and measurement, *Commun. Math. Phys.* **11**, 214–220. [887]
- Hellwig, K.-E. and K. Kraus (1970)**, Pure operations and measurement. II, *Commun. Math. Phys.* **16**, 142–147. [888]
- Hellwig, K.-E. and D. Krausser (1974)**, Propositional systems and measurements — I, *Int. J. Theor. Phys.* **9**, 277–289. [889]
- Hellwig, K.-E. and D. Krausser (1974a)**, Propositional systems and measurements — II, *Int. J. Theor. Phys.* **10**, 261–272 + Erratum, *Ibid.* **17**, 81. [890]
- Hellwig, K.-E. and D. Krausser (1977)**, Propositional systems and measurements — III. Quasitensorproducts of certain orthomodular lattices, *Int. J. Theor. Phys.* **16**, 775–793. [891]
- Hellwig, K.-E. and M. Singer (1990)**, Distinction of classical convex structures in the general framework of statistical models, in **Ján90**, pp. 79–84. [892]
- Hellwig, K.-E. and W. Stulpe (1983)**, A formulation of quantum stochastic processes and some of its properties, *Found. Phys.* **13**, 673–699. [893]
- Henkin, L. (1960)**, Review of Putnam, *Three-valued logic*, Feyerabend, *Reichenbach's interpretation of quantum mechanics*, and Levi, *Putnam's three truth-values*, *J. Symb. Logic*, **25**, 289–291. [894]
- Henle, J. (1985)** see Cohen, D. W. and J. Henle (1985).
- Hensz, E. (1990)**, Strong laws of large numbers for nearly orthogonal sequences of operators in von Neumann algebras, in **Ján90**, pp. 85–91. [895]
- Hepp, K. (1972)**, Quantum theory of measurement and macroscopic observables, *Helv. Phys. Acta*, **45**, 237–248. [896]
- Herbut, F. (1984)**, On a possible empirical meaning of meets and joins for quantum propositions, *Lett. Math. Phys.* **8**, 397–402. [897]
- Herbut, F. (1985)**, Characterisations of compatibility, comparability, and orthogonality of quantum propositions in terms of chains of filters, *J. Phys. A* **18**, 2901–2907. [898]
- Herbut, F. (1986)**, Critical investigation of Jauch's approach of the quantum theory of measurement, *Int. J. Theor. Phys.* **25**, 863–875. [899]

- Herman, L. (1971)**, Semi-orthogonality in Rickart rings, *Pacif. J. Math.* **39**, 179–186. [900]
- Herman, L. (1985,90)** see Greechie, R. J. and L. Herman (1985,90).
- Herman, L, E. L. Marsden, and R. Piziak (1975)**, Implication connectives in orthomodular lattices, *Notre Dame J. Formal Logic*, **16**, 305–328. [901]
- Herman, L. and R. Piziak (1974)**, Modal propositional logic on an orthomodular basis, *J. Symb. Logic*, **39**, 478–488. [902]
- Herrmann, C. (1981)**, A finitely generated modular ortholattice, *Canad. Math. Bull.* **24**, 241–243. [903]
- Herrmann, C. (1984)**, On elementary Arguesian lattices with four generators, *Algebra Universalis*, **18**, 225–259. [904]
- Hicks, T. L. (1978)** see Carlson, J. W. and T. L. Hicks (1978).
- Hiley, B. J. (1980,80a)** see Frescura, F. A. M. and B. J. Hiley (1980,80a).
- Hiley, B. J. (1980b)**, Towards an algebraic description of reality, *Ann. Fond. de Broglie*, **5**, 75–97. [905]
- Hilgevoord, J. (1980,81)** see Cooke, R. and J. Hilgevoord (1980,81).
- Hockney, D. (1978)**, The significance of a hidden variable proof and the logical interpretation of quantum mechanics, *Int. J. Theor. Phys.* **17**, 685–707. [906]
- Hoering, W. (1981)**, On understanding quantum logic, *Erkenntnis*, **16**, 227–233. [907]
- Holdsworth, D. G. (1977)**, Category theory and quantum mechanics (kinematics), *J. Phil. Logic*, **6**, 441–453. [908]
- Holdsworth, D. G. (1978)**, A role for categories in the foundations of quantum theory, in **PSA78**, Vol. 1, pp. 257–267. [909]
- Holdsworth, D. G. and C. A. Hooker (1983)**, A critical survey of quantum logic, in **Scientia83**, pp. 127–246. [910]
- Holland, S. (1975)** see Gudder, S. and S. Holland (1975).
- Holland Jr., S. S. (1963)**, A Radon–Nikodym theorem in dimension lattices, *Trans. Am. Math. Soc.* **108**, 66–87. [911]
- Holland Jr., S. S. (1964)**, Distributivity and perspectivity in orthomodular lattices, *Trans. Am. Math. Soc.* **112**, 330–343. [912]
- Holland Jr., S. S. (1969)**, Partial solutions to Mackey’s problem about modular pairs and completeness, *Canad. J. Math.* **21**, 1518–1525. [913]
- Holland Jr., S. S. (1970)**, The current interest in orthomodular lattices, in Abbott, J. C. (ed.), *Trends in lattice theory*, Van Nostrand, New York (1970), pp. 41–126; Reprinted in **Hooker75I**, pp. 437–496. [914]
- Holland Jr., S. S. (1970a)**, An m -orthocomplete orthomodular lattice is m -complete, *Proc. Am. Math. Soc.* **24**, 716–718. [915]
- Holland Jr., S. S. (1973)**, Isomorphisms between interval sublattices of an orthomodular lattice, *Hiroshima Math. J.* **3**, 227–241. [916]
- Holland Jr., S. S. (1973a)**, Remarks on type I Baer and Baer $*$ -rings, *J. Algebra*, **27**, 516–522. [917]
- Holland Jr., S. S. (1977)**, Orderings and square roots in $*$ -fields, *J. Algebra*, **46**, 207–219. [918]

- Holland Jr., S. S. (1980)**, $*$ -valuations and ordered $*$ -fields, *Trans. Am. Math. Soc.* **262**, 219–243. [919]
- Holland Jr., S. S. (1976)** see Maeda, S. and S. S. Holland, Jr. (1976).
- Holm, C. (1986)** see Finkelstein, D., S. R. Finkelstein, and C. Holm (1986).
- Hooker, C. A. (1973)** (ed.), *Contemporary research in the foundations of philosophy of quantum theory*, (Proceedings of a conference held at the University of Western Ontario, London, Canada, 1971), D. Reidel, Dordrecht-Holland. [920]
- Hooker, C. A. (1973a)**, Metaphysics and modern physics, in **Ontario71**, 174–304. [921]
- Hooker, C. A. (1975)** (ed.), *The logico-algebraic approach to quantum mechanics*, Vol. I. *Historical evolution*, D. Reidel, Dordrecht-Holland. [922]
- Hooker, C. A. (1979)** (ed.), *The logico-algebraic approach to quantum mechanics*, Volume II. *Contemporary consolidation*, D. Reidel, Dordrecht-Holland. [923]
- Hooker, C. A. (1979a)** (ed.), *Physical theory as logico-operational structure*, D. Reidel, Dordrecht-Holland. [924]
- Hooker, C. A. (1983)** see Holdsworth, D. G. and C. A. Hooker (1983).
- Hooker75I,79,79II** see Hooker, C. A. (1975,79a,79).
- Horneffer, K. (1964)** see Dombrowski, H. D. and K. Horneffer (1964).
- Horowitz, D. D. (1970)**, Modalities and the quantum theory, *Int. J. Theor. Phys.* **3**, 79–80. [925]
- Horst, E. (1975)** see Eilers, M. and E. Horst (1975).
- Horwich, P. (1982)**, Three forms of realism, *Synthese*, **51**, 181–201. [926]
- Hübner, K. (1964)**, Über den Begriff der Quantenlogik, *Sprache in Techn. Zeitalter*, **12**, 925–934. [927]
- Hudson, R. L. (1971)** see Cushen, C. and R. Hudson (1971).
- Hudson, R. L. (1978)** see Gudder, S. P. and R. L. Hudson (1978).
- Hudson, R. L. (1981)**, Invited comment on Professor Bub's paper, *Erkenntnis*, **16**, 295–297. [928]
- Hudson, R. L. (1988)**, Elements of quantum stochastic calculus, in **Ján88**, 46–52. [929]
- Hugenholtz, N. M. (1967)**, On the factor type of equilibrium states in quantum statistical mechanics, *Commun. Math. Phys.* **6**, 189–193. [930]
- Hughes, R. I. G. (1980)**, Quantum logic and the interpretation of quantum mechanics, in **PSA80**, Vol. I, pp. 55–67. [931]
- Hughes, R. I. G. (1981)**, Realism and quantum logic, in **Erice79**, pp. 77–87. [932]
- Hughes, R. I. G. (1981a)**, Quantum logic, *Sci. Am.* **245**, Oct. 146–157. [933]
- Hughes, R. I. G. (1985)**, Semantic alternatives in partial Boolean quantum logic, *J. Phil. Logic*, **14**, 411–446. [934]
- Huhn, A. (1972)**, Schwach distributive Verbände. I, *Acta Sci. Math. Szeged.* **33**, 297–305. [935]
- Hultgren, III, B. O. and A. Shimony (1977)**, The lattice of verifiable propositions of the spin-1 system, *J. Math. Phys.* **18**, 381–394. [936]
- Idziak, P. M. (1988)**, Undecidability of relatively free Hilbert algebras, *Algebra Universalis*, **25**, 17–26. [937]
- Ingleby, M. (1971)**, Some criticism of quantum logic, *Helv. Phys. Acta*, **44**, 299–307. [938]

- Iqbalunnisa (1965)**, Neutrality in weakly modular lattices, *Acta Math. Hung.* **16**, 325–326. [939]
- Iqbalunnisa (1971)**, On lattices whose lattices of congruence are Stone lattices, *Fund. Math.* **70**, 315–318. [940]
- Iturrioz, L. (1980)**, Orthomodular ordered sets and orthogonal closure spaces, *Portugal. Math.* **39**, 477–488. [941]
- Iturrioz, L. (1982)**, A simple proof of a characterization of complete orthocomplemented lattices, *Bull. London Math. Soc.* **14**, 542–544. [942]
- Iturrioz, L. (1983)**, A topological representation theory for orthomodular lattices, in **Bolyai33**, pp. 503–524. [943]
- Iturrioz, L. (1986)**, A representation theory for orthomodular lattices by means of closure spaces, *Acta Math. Hung.* **47**, 145–151. [944]
- Iturrioz, L. (1988)**, Ordered structures in the description of quantum systems, in Carnielli, W. A. and L. P. de Alcantara (eds.), *Mathematical progress, methods, and applications of mathematical logic*, (Compinas, 1985), *Contemp. Math. Am. Math. Soc.* **69**, 55–75. [945]
- Ivanović, I. D. (1988)**, Two models violating Bell’s inequality, *Phys. Lett. A* **133**, 101–104. [946]
- Ivert, P.-A. and T. Sjödin (1978)**, On the impossibility of a finite propositional lattice for quantum mechanics, *Helv. Phys. Acta*, **51**, 635–636. [947]
- Jadczyk, A. Z. (1977)** see Cegła, W. and A. Z. Jadczyk (1977).
- Jajte, R. (1985)**, *Strong limit theorem in non-comutative probability theory*, Springer-Verlag, Berlin. [948]
- Jakubík, J. (1981)**, On isometries of non-Abelian lattice ordered groups, *Math. Slovaca*, **31**, 171–175. [949]
- Jammer, M. (1974)**, *The philosophy of quantum mechanics. The interpretations of quantum mechanics in historical perspective*, John Wiley & Sons, New York. [950]
- Jammer, M. (1982)**, A note on Peter Gibbins’ “A note on quantum logic and the uncertainty principle,” *Phil. Sci.* **49**, 478–479. [951]
- Ján88** see Dvurečenskij, A. and S. Pulmannová (1988a).
- Ján90** see Dvurečenskij, A. and S. Pulmannová (1990).
- Jancewicz, B. (1977)** see Cegła, W. and B. Jancewicz (1977).
- Janiš, V. (1988)**, Measure induced topology in product logics, in **Ján88**, 53–54. [952]
- Janiš, V. and Z. Riečanová (1990)**, *Completeness in sums of Boolean algebras and quantum logics*, Nova Science Publishers, New York. [953]
- Janowitz, M. F. (1963)**, Quantifiers and orthomodular lattices, *Pacif. J. Math.* **13**, 1241–1249. [954]
- Janowitz, M. F. (1964)**, On the antitone mapping of a poset, *Proc. Am. Math. Soc.* **15**, 529–533. [955]
- Janowitz, M. F. (1965)**, IC-lattices, *Portugal. Math.* **24**, 115–122. [956]
- Janowitz, M. F. (1965a)**, Quantifier theory on quasi-orthomodular lattices, *Illinois J. Math.* **9**, 660–676. [957]
- Janowitz, M. F. (1965b)**, A characterization of standard ideals, *Acta Math. Hung.* **16**, 289–301. [958]

- Janowitz, M. F. (1965c)**, Baer semigroups, *Duke Math. J.* **32**, 85–96. [959]
- Janowitz, M. F. (1966)**, A semigroup approach to lattices, *Canad. J. Math.* **18**, 1212–1223. [960]
- Janowitz, M. F. (1967)**, Residuated closure operators, *Portugal. Math.* **26**, 221–252. [961]
- Janowitz, M. F. (1967a)**, The center of a complete relatively complemented lattice is a complete sublattice, *Proc. Am. Math. Soc.* **18**, 189–190. [962]
- Janowitz, M. F. (1968)**, A note on generalized orthomodular lattices, *J. Natur. Sci. Math.* **8**, 89–94. [963]
- Janowitz, M. F. (1968a)**, Perspective properties of relatively complemented lattices, *J. Natur. Sci. Math.* **8**, 193–210. [964]
- Janowitz, M. F. (1968b)**, Section semicomplemented lattices, *Math. Z.* **108**, 63–76. [965]
- Janowitz, M. F. (1970)**, Separation conditions in relatively complemented lattices, *Colloq. Math.* **22**, 25–34. [966]
- Janowitz, M. F. (1971)**, Indexed orthomodular lattices, *Math. Z.* **119**, 28–32. [967]
- Janowitz, M. F. (1972)**, Constructible lattices, *J. Austral. Math. Soc.* **14**, 311–316. [968]
- Janowitz, M. F. (1972a)**, The near center of an orthomodular lattice, *J. Austral. Math. Soc.* **14**, 20–29. [969]
- Janowitz, M. F. (1973)** see Randall, C. H., M. F. Janowitz, and D. J. Foulis (1973).
- Janowitz, M. F. (1973a)**, On a paper by Iqbalunnisa, *Fund. Math.* **78**, 177–182. [970]
- Janowitz, M. F. (1976)**, A note on Rickart rings and semi-Boolean algebras, *Algebra Universalis*, **6**, 9–12. [971]
- Janowitz, M. F. (1976a)**, Modular SM-semilattices, *Algebra Universalis*, **6**, 13–20. [972]
- Janowitz, M. F. (1977)**, Complemented congruences on complemented lattices, *Pacif. J. Math.* **73**, 87–90. [973]
- Janowitz, M. F. (1977a)**, A triple construction for SM-semilattices, *Algebra Universalis*, **7**, 389–402. [974]
- Janowitz, M. F. (1980)**, On the $*$ -order for Rickart $*$ -rings, *Algebra Universalis*, **16**, 360–369. [975]
- Janowitz, M. F. (1990)**, Interval order and semiorder lattices, *Found. Phys.* **20**, 715–732. [976]
- Jauch, J. M. (1959)**, Systeme von Observablen in der Quantenmechanik, *Helv. Phys. Acta*, **32**, 252–253. [977]
- Jauch, J. M. (1960)**, Systems of observables in quantum mechanics, *Helv. Phys. Acta*, **33**, 711–726. [978]
- Jauch, J. M. (1962,62a,63)** see Finkelstein, D., J. M. Jauch, S. Schiminovich, and D. Speiser (1962–63).
- Jauch, J. M. (1964)**, The problem of measurement in quantum mechanics, *Helv. Phys. Acta*, **37**, 293–316. [979]
- Jauch, J. M. (1965)** see Emch, G. and J. M. Jauch (1965).

- Jauch, J. M. (1968)**, *Foundations of quantum mechanics*, Addison–Wesley, Reading, Mass. [980]
- Jauch, J. M. (1971)**, Foundations of quantum mechanics, in **Fermi70**, pp. 20–55. [981]
- Jauch, J. M. (1973)**, The mathematical structure of elementary quantum mechanics, in **Trieste72**, pp. 300–319. [982]
- Jauch, J. M. (1973a)**, The problem of measurement in quantum mechanics, in **Trieste72**, pp. 684–686. [983]
- Jauch, J. M. (1974)**, The quantum probability calculus, *Synthese*, **29**, 131–154; Reprinted in **Suppes76**, pp. 123–146. [984]
- Jauch, J. M. (1979)** see Finkelstein, D., J. M. Jauch, and D. Speiser (1979).
- Jauch, J. M. and C. Piron (1963)**, Can hidden variables be excluded in quantum mechanics?, *Helv. Phys. Acta*, **36**, 827–837. [985]
- Jauch, J. M. and C. Piron (1969)**, On the structure of quantal proposition system, *Helv. Phys. Acta*, **42**, 842–848; Reprinted in **Hooker75I**, pp. 427–436. [986]
- Jauch, J. M. and C. Piron (1970)**, What is “Quantum logic”?, in Freund, P. G. O., C. J. Goebel, and Y. Nambu (eds.), *Quanta. Essays in theoretical physics dedicated to Gregor Wentzel*, University of Chicago Press, Chicago (1970), pp. 166–181. [987]
- Jeffcott, B. (1972)**, The center of an orthologic, *J. Symb. Logic*, **37**, 641–645. [988]
- Jeffcott, B. (1973)**, Commuting observables in a σ -orthologic, *Indiana Univ. Math. J.* **23**, 369–376. [989]
- Jeffcott, B. (1975)**, Decomposable orthologics, *Notre Dame J. Formal Logic*, **16**, 329–338. [990]
- Jenč, F. (1966)**, Remarks on quaternion quantum mechanics, *Czechoslovak J. Phys.* **B 16**, 555–562. [991]
- Jenč, F. (1972)**, Some theorems on atomicity in axiomatic quantum mechanics, *J. Math. Phys.* **13**, 1675–1680. [992]
- Jenč, F. (1974)**, Atomicity and maximality in axiomatic quantum mechanics, *Rep. Math. Phys.* **6**, 253–264. [993]
- Jenč, F. (1979)**, The conceptual analysis (CA) method in theories of microchannels: Application to quantum theory. Part I. Fundamental concepts, *Found. Phys.* **9**, 589–608. [994]
- Jenč, F. (1979a)**, The conceptual analysis (CA) method in theories of microchannels: Application to quantum theory. Part II. Idealizations. “Perfect measurements”, *Found. Phys.* **9**, 707–737. [995]
- Jenč, F. (1979b)**, The conceptual analysis (CA) method in theories of microchannels: Application to quantum theory. Part III. Idealizations. Hilbert space representation, *Found. Phys.* **9**, 897–928. [996]
- Jenč, F. (1980)**, Die CA (conceptual analysis) Methode und ihre Anwendung im submikroskopischen Bereich, in **Cologne78**, pp. 139–158. [997]
- Joensuu85,87** see Lahti, P. and P. Mittelstaedt (1985,87).
- Johnson, C. S. (1971)**, Semigroups coordinatizing posets and semilattices, *J. London Math. Soc.* **4**, 277–283. [998]
- Johnson, C. S. (1971a)**, On certain poset and semilattice homomorphisms, *Pacif. J. Math.* **39**, 703–715. [999]

- Jones, R. (1977)**, Causal anomalies and the completeness of quantum theory, *Synthese*, **35**, 41–78. [1000]
- Jones, V. F. R. (1976)**, Quantum mechanics over fields of non-zero characteristic, *Lett. Math. Phys.* **1**, 99–103. [1001]
- Jónsson, B. (1954)**, Modular lattices and Desargues' theorem, *Math. Scand.* **2**, 295–314. [1002]
- Jónsson, B. (1959)**, Lattice-theoretic approach to projective and affine geometry, in Henkin, L., P. Suppes, and A. Tarski (eds.), *The axiomatic method with special reference to geometry and physics*, [*Studies in logic and the foundations of physics*], North-Holland, Amsterdam (1959), pp. 188–203. [1003]
- Jónsson, B. and J. D. Monk (1969)**, Representations of primary Arguesian lattices, *Pacif. J. Math.* **30**, 95–139. [1004]
- Jónsson, B. (1973)** see Grätzer, G., B. Jónsson, and H. Lakser (1973).
- Jónsson, B. (1976)** see Freese, R. and B. Jónsson (1976).
- Jordan, P. (1950)**, Zur Quanten-Logik, *Arch. Math.* **2**, 166–177. [1005]
- Jordan, P. (1952)**, Zur axiomatischen Begründung der Quantenmechanik, *Z. Phys.* **133**, 21–29. [1006]
- Jordan, P. (1959)**, Quantenlogik und das kommutative Gesetz, in Henkin, L., P. Suppes, and A. Tarski (eds.), *The axiomatic method with special reference to geometry and physics*, North-Holland, Amsterdam (1959), pp. 365–375. [1007]
- Jordan, P. (1962)**, Bemerkungen zur Quantenlogik, *Ann. Fac. Sci., Univ. Clermont-Ferrand*, **8**, 159–166. [1008]
- Jordan, P. and J. von Neumann (1935)**, On inner products in linear metric spaces, *Ann. Math.* **36**, 719–732. [1009]
- Jordan, P., J. von Neumann, and E. Wigner (1934)**, On the algebraic generalization of quantum mechanical formalism, *Ann. Math.* **35**, 29–64. [1010]
- Joshi, G. C. (1988)** see Nash, C. G. and G. C. Joshi (1988).
- Kägi-Romano, U. (1977)**, Quantum logic and generalized probability theory, *J. Phil. Logic*, **6**, 455–462. [1011]
- Kakutani, S. and G. Mackey (1944)**, Two characterizations of real Hilbert space, *Ann. Math.* **45**, 50–58. [1012]
- Kakutani, S. and G. Mackey (1946)**, Ring and lattice characterization of complex Hilbert space, *Bull. Am. Math. Soc.* **52**, 727–733. [1013]
- Kalinin, V. V. (1976a)**, Orthomodular partially ordered sets with dimension, *Algebra and Logics*, **15**, 335–348 (1977); A transl. of *Algebra i Logika*, **15**, 535–537. [1014]
- Kalinin, V. V. (1979)**, Dimension functions on an orthomodular partially ordered set, *Constr. Th. Funct. Analysis, Kazan (Univ. Kazan)*, **2**, 41–43. [1015]
- Kallus, M. and V. Trnková (1987)**, Symmetries and retracts of quantum logics, *Int. J. Theor. Phys.* **26**, 1–9. [1016]
- Kalmár, I. G. (1978)**, Atomistic orthomodular lattices and a generalized probability theory, *Publ. Math. Debrecen*, **25**, 139–153. [1017]
- Kalmár, I. G. (1983)**, Conditional probability measures on propositional systems, *Publ. Math. Debrecen*, **30**, 101–115. [1018]

- Kalmár, I. G. (1983a)**, On the measurable homomorphisms, *Publ. Math. Debrecen*, **30**, 239–241. [1019]
- Kalmár, I. G. (1984)**, On random variables on the atom space of an orthomodular atomistic σ -lattice, *Publ. Math. Debrecen*, **31**, 85–93. [1020]
- Kalmár, I. G. (1985)**, $*$ -structures and orthomodular lattices, *Publ. Math. Debrecen*, **32**, 1–5. [1021]
- Kalmár, I. G. (1985a)**, Lattice theoretical characterization of quantum probability space. I, *Publ. Math. Debrecen*, **32**, 179–185. [1022]
- Kalmbach, G. (1971,72,73)** see Bruns, G. and G. Kalmbach (1971,72,73).
- Kalmbach, G. (1973a)**, Orthomodular logic, in Schmidt, J. et al. (ed), *Proceedings of the Houston lattice theory conference*, University of Houston, Houston (1973), pp. 498–503. [1023]
- Kalmbach, G. (1974)**, Orthomodular logic, *Z. Math. Logik Grundl. Math.* **20**, 395–406. [1024]
- Kalmbach, G. (1977)**, Orthomodular lattices do not satisfy any special lattices equation, *Arch. Math.* **27**, 7–8. [1025]
- Kalmbach, G. (1980)**, The Hilbert space model of orthomodular lattices, in **Bolyai33**, pp. 525–547. [1026]
- Kalmbach, G. (1981)**, Omologic as a Hilbert type calculus, in **Erice79**, pp. 330–340. [1027]
- Kalmbach, G. (1983)**, Orthomodulare Verbände, *Jber. d. Dt. Math.-Verrein.* **85**, 33–49. [1028]
- Kalmbach, G. (1983a)**, *Orthomodular lattices*, Academic Press, London. [1029]
- Kalmbach, G. (1984)**, Automorphism groups of orthomodular lattices, *Bull. Austral. Math. Soc.* **29**, 309–313. [1030]
- Kalmbach, G. (1985)** see Gensheimer, H. and G. Kalmbach (1985).
- Kalmbach, G. (1985a)**, 1982 news about orthomodular lattices, *Discrete Math.* **53**, 125–135. [1031]
- Kalmbach, G. (1986)**, *Measures and Hilbert lattices*, World Scientific, Singapore. [1032]
- Kalmbach, G. (1986a)**, The free orthomodular word problem is solvable, *Bull. Austral. Math. Soc.* **34**, 219–233. [1033]
- Kalmbach, G. (1990)**, Quantum measure spaces, *Found. Phys.* **20**, 801–821. [1034]
- Kalmbach, G. (1990a)**, On orthomodular lattices, in Bogart, K. et al. (eds.), *The Dilworth Theorems*, Birkhäuser, Basel (1990), pp. 85–87. [1035]
- Kálnay, A. J. (1981)**, On certain intriguing physical, mathematical, and logical aspects concerning quantization, *Hadronic J.* **4**, 1127–1165. [1036]
- Kamber, F. (1964)**, Die Struktur des Aussagenskalkulus in einer physikalischen Theorie, *Nachrichten der Akad. Wiss. Math.-Physik. Klasse*, **10**, 103–124 (1964); Translated [The structure of the propositional calculus of a physical theory], in **Hooker75I**, pp. 221–245. [1037]
- Kamber, F. (1965)**, Zweiwertige Wahrscheinlichkeitsfunktionen auf ortokomplementären Verbänden, *Math. Ann.* **158**, 158–196. [1038]
- Kamlah, A. (1980)**, Ist die Mittelstaedt–Stachowsche Quantendialogik eine analytische Theorie?, in **Cologne78**, pp. 73–91. [1039]

- Kamlah, A. (1981)**, The connection between Reichenbach's three valued and v. Neumann's lattice-theoretical quantum logic, *Erkenntnis*, **16**, 315–325. [1040]
- Kamlah, A. (1981a)**, Some remarks on a paper by P. Suppes, *Erkenntnis*, **16**, 327–333. [1041]
- Kannenberg, L. (1989)**, Quantum formalism via signal analysis, *Found. Phys.* **19**, 367–383. [1042]
- Kaplansky, I. (1955)**, Any orthocomplemented complete modular lattice is a continuous geometry, *Ann. Math.* **61**, 524–541. [1043]
- Katriňák, T. (1970)**, Eine Charakterisierung der fast schwach modularen Verbände, *Math. Z.* **114**, 49–58. [1044]
- Katriňák, T. and T. Neubrunn (1973)**, On certain generalized probability domains, *Mat. Časopis*, **23**, 209–215. [1045]
- Katrnoška, F. (1982)**, On the representation of orthocomplemented posets, *Comment. Math. Univ. Carolin.* **23**, 489–498. [1046]
- Katrnoška, F. (1985)**, A characterization of the center of an orthomodular poset, *Sci. Papers Prague Inst. Chem. Techn. Math. M* **1**, 113–120. [1047]
- Katrnoška, F. (1988)**, On some topological results concerning the orthoposets, in *Proceedings of the conference: Topology and Measure, V*, held in Binz, 1987, Wissensch. Beitr., Ernst–Moritz–Arndt Univ., Greifswald (1988), pp. 95–101. [1048]
- Keane, M. (1985)** see Cooke, R., M. Keane, and W. Moran (1985).
- Keller, H. A. (1980)**, Ein nicht-klassischer Hilbertscher Raum, *Math. Z.* **172**, 41–49. [1049]
- Keller, H. A. (1980a)**, On the lattice of all closed subspaces of a Hermitian space, *Pacif. J. Math.* **89**, 105–110. [1050]
- Keller, H. A. (1981,83)** see Gross, H. and H. A. Keller (1981,83).
- Keller, H. A. (1986)**, On valued, complete fields and their automorphism, *Pacif. J. Math.* **121**, 397–406. [1051]
- Keller, H. A. (1988)**, Measures on orthomodular vector space lattices, *Studia Math.* **88**, 183–195. [1052]
- Keller, H. A. (1990)**, Measures on infinite-dimensional orthomodular spaces, *Found. Phys.* **20**, 575–604. [1053]
- Keller, K. (1988)**, Orthoposets of extreme points, in *Proceedings of the conference: Topology and Measure, V*, held in Binz, 1987, Wissensch. Beitr., Ernst–Moritz–Arndt Univ., Greifswald (1988), pp. 102–108. [1054]
- Keller, K. (1988a)**, Extreme point embeddings of orthoposets, in **Ján88**, pp. 59–63. [1055]
- Keller, K. (1989)**, Set of states and extreme points, *Int. J. Theor. Phys.* **28**, 27–34. [1056]
- Keller, K. (1989a)**, Orthoposets of extreme points of order-intervals, *Math. Nachr.* **143**, 75–83. [1057]
- Keller, K. (1989b)**, Orthoposets of extreme points and quantum logics, *Rep. Math. Phys.* **27**, 169–178. [1058]
- Keller, K. (1990)**, On the projection lattice of a W^* -algebra, in **Ján90**, pp. 105–109. [1059]

- Kimble Jr, R. J. (1969)**, Ortho-implication algebras, *Notices Am. Math. Soc.* **16**, 772–773. [1060]
- Klagenfurt82** see Eigenthaler, G. et al (1983).
- Kläy, M. P. (1985)**, *Stochastic models on empirical systems, empirical logic and quantum logics, and states on hypergraphs*, (Dissertation, University of Bern; Mentor: G. T. Rüttimann), Fischer Druck, Münsingen, Switzerland. [1061]
- Kläy, M. P. (1986)** see Gudder, S. P., M. P. Kläy, and G. T. Rüttimann (1986).
- Kläy, M. P. (1987)**, Quantum logic properties of hypergraphs, *Found. Phys.* **17**, 1019–1036. [1062]
- Kläy, M. P. (1988)**, Einstein–Podolsky–Rosen experiments: The structure of the probability space. I. *Found. Phys. Lett.* **1**, 205–244. [1063]
- Kläy, M. P. (1988a)**, Einstein–Podolsky–Rosen experiments: The structure of the probability space. II. *Found. Phys. Lett.* **1**, 305–319. [1064]
- Kläy, M. P. and D. J. Foulis (1990)**, Maximum likelihood estimation on generalized sample spaces: An alternative resolution of Simpson’s paradox, *Found. Phys.* **20**, 777–799. [1065]
- Kläy, M. P., C. Randall, and D. Foulis (1987)**, Tensor product and probability weights, *Int. J. Theor. Phys.* **26**, 199–219. [1066]
- Klukowski, J. (1975)**, On Boolean orthomodular posets, *Demonstratio Math.* **8**, 405–423. [1067]
- Klukowski, J. (1975a)**, On the representation of Boolean orthomodular partially ordered sets, *Demonstratio Math.* **8**, 405–423. [1068]
- Klüppel, M. and H. Neumann (1989)**, The space–time structure of quantum systems in external fields, *Found. Phys.* **19**, 985–998. [1069]
- Kochen, S. and E. P. Specker (1965)**, Logical structures arising in quantum theory, in Addison, J., L. Henkin, and A. Tarski (eds.), *The theory of models*, North-Holland, Amsterdam (1965), pp. 177–189; Reprinted in **Hooker75I**, pp. 263–276. [1070]
- Kochen, S. and E. P. Specker (1965a)**, The calculus of partial propositional functions, in Bar–Hillel, Y. (ed.), *Logic, methodology, and philosophy of science*, North-Holland, Amsterdam (1965), pp. 45–57; Reprinted in **Hooker75I**, pp. 277–292. [1071]
- Kochen, S. and E. P. Specker (1967)**, The problem of hidden variables in quantum mechanics, *J. Math. Mech.* **17**, 59–67 (1967); Reprinted in **Hooker75I**, pp. 293–328. [1072]
- Kolesárová, A. and R. Mesiar (1990)**, A note on a representation of fuzzy observables, *Bull. Sous-Ensembl. Flous Appl.* **43**, 42–48. [1073]
- Köhler, E. (1982)**, Orthomodulare Verbände mit Regularitätsbedingungen, *J. Geom.* **19**, 130–145. [1074]
- Kôpka, F. (1988,90)** see Dvurečenskij, A. and F. Kôpka (1988,90).
- Kôpka, F. and B. Riečan (1988)**, On representation of observables by Borel measurable functions, in **Ján88**, pp. 68–71. [1075]

- Kostro, L., A. Posiewnik, J. Pykacz, and M. Żukowski (1988)** (eds.), *Problems in quantum physics; Gdańsk '87, Recent and future experiments and interpretations*, [Proceedings of a symposium held in Gdańsk, Poland, September 21–25, 1987], World Scientific, Singapore (1988). [1076]
- Kotas, J. (1963)**, Axioms for Birkhoff — v. Neumann quantum logic, *Bull. Acad. Polon. Sci., Sér. Sci. Math. Astr. et Phys.* **11**, 629–632. [1077]
- Kotas, J. (1963a)**, On decomposition of the modular orthocomplementary finite-generated lattice, *Bull. Acad. Polon. Sci., Sér. Sci. Math. Astr. et Phys.* **11**, 639–642. [1078]
- Kotas, J. (1967)**, An axiom system for the modular logic, *Studia Logica*, **21**, 17–38. [1079]
- Kotas, J. (1971)**, The modular logic as a calculus of logical schemata, *Studia Logica*, **27**, 73–78. [1080]
- Kotas, J. (1974)**, On quantity of logical values in the discussive D_2 system and in modular logic, *Studia Logica*, **33**, 273–275. [1081]
- Krakowiak, W. (1985)**, Zero-one laws for A -decomposable measures on Banach spaces, *Bull. Polish Acad. Sci. Math.* **33**, 85–90. [1082]
- Kraus, K. (1968)**, Algebras of observables with continuous representation of symmetry groups, *Commun. Math. Phys.* **7**, 99–111. [1083]
- Kraus, K. (1969,70)** see Hellwig, K.-E. and K. Kraus (1969,70).
- Kraus, K. (1971)**, General state changes in quantum theory, *Ann. of Phys.* **64**, 311–335. [1084]
- Kraus, K. (1974)**, Operations and effects in the Hilbert space formulation of quantum theory, in **Marburg73**, pp. 206–229. [1085]
- Kraus, K. (1983)**, *States, effects, and operations. Fundamental notions of quantum theory, Lectures in mathematical physics at the University of Texas at Austin*, [Lecture Notes in Physics 190], Springer-Verlag, Berlin-Heidelberg. [1086]
- Krause, U. (1974)**, The inner orthogonality of convex sets in axiomatic quantum mechanics, in **Marburg73**, pp. 269–280. [1087]
- Krausser, D. (1974,74a,77)** see Hellwig, K.-E. and D. Krausser (1974,74a,77).
- Krausser, D. (1982)**, On orthomodular amalgamation of Boolean algebras, *Arch. Math.* **39**, 92–96. [1088]
- Kristóf, J. (1985)**, Ortholattis linéarisables, *Acta Sci. Math. Szeged.* **49**, 387–395. [1089]
- Kröger, H. (1973)**, Zwerch-Assoziativität und verbandsähnliche Algebren, *Bayerische Akad. d. Wiss. Math. — Naturwiss. Klasse, Sitzungsberichte*, Jahrgang 1973, pp. 23–48. [1090]
- Kröger, H. (1976)**, Das Assoziativgesetz als Kommutativitätsaxiom in Booleschen Zwerchverbänden, *J. Reine Angew. Math.* **285**, 53–58. [1091]
- Kröger, H. (1979)**, Ein Assoziativitätskriterium von Foulis-Holland-Typ, *J. Reine Angew. Math.* **289**, 196–198. [1092]
- Kron, A. (1983)**, Is the concept of an oml definable in relevance logic?, in **Salzburg83**, pp. 90–93. [1093]
- Kron, A., Z. Marić, and S. Vujošević (1981)**, Entailment and quantum logic, in **Erice79**, pp. 193–207. [1094]

- Kronfli, N. S. (1969)**, Abstract scattering theory, *Int. J. Theor. Phys.* **2**, 345–349. [1095]
- Kronfli, N. S. (1970)**, States on generalized logics, *Int. J. Theor. Phys.* **3**, 191–198. [1096]
- Kronfli, N. S. (1970a)**, Integration theory of observables, *Int. J. Theor. Phys.* **3**, 199–204; Reprinted in **Hooker75I**, pp. 497–502. [1097]
- Kronfli, N. S. (1970b)**, Probabilistic formulation of classical mechanics, *Int. J. Theor. Phys.* **3**, 395–399; Reprinted in **Hooker75I**, pp. 503–507. [1098]
- Kronfli, N. S. (1971)**, Atomicity and determinism in Boolean Systems, *Int. J. Theor. Phys.* **4**, 141–143; Reprinted in **Hooker75I**, pp. 509–512. [1099]
- Kruszyński, P. (1976)**, Automorphisms of quantum logic, *Rep. Math. Phys.* **10**, 213–217. [1100]
- Kruszyński, P. (1980)**, Remark on automorphisms of quantum logic, *Rep. Math. Phys.* **17**, 59–61. [1101]
- Kruszyński, P. (1981)**, Non-linear integration and signed measures on von Neumann algebras, in **Erice79**, pp. 437–45. [1102]
- Kuhn, K. P. (1983)**, Extending homomorphisms from orthomodular lattices to Foulis semigroups, in **Klagenfurt82**, pp. 229–232. [1103]
- Kummer, H. (1971)** see Giles, R. and H. Kummer (1971).
- Kummer, H. (1987)**, A constructive approach to the foundations of quantum mechanics, *Found. Phys.* **17**, 1–62. [1104]
- Kummer, H. (1990)**, JB-algebras and foundational questions of quantum mechanics (A constructive approach to the foundations of quantum mechanics), in **Gdańsk89**, pp. 55–65. [1105]
- Kunsemüller, H. (1964)**, Zur Axiomatik der Quantenlogik, *Phil. Naturalis*, **8**, 363–376. [1106]
- Künzi, U.-M. (1985)** see Gross, H. and U.-M. Künzi (1985).
- Kupczyński, M. (1974)**, Is Hilbert space language too rich?, *Int. J. Theor. Phys.* **10**, 297–316; Reprinted in **Hooker79**, pp. 89–113. [1107]
- Kusak, E. (1987)**, Desarguesian Euclidean planes and their axiom system, *Bull. Polish Acad. Sci. Math.* **35**, 87–91. [1108]
- Kuznetsov, B. G. (1970)**, On quantum-relativistic logic, *Sov. Studies Phil.* **9**, 203–211 (1970/71). [1109]
- Kuznetsov, B. G. et al. (1970)**, Soviet symposium on logic and quantum mechanics, *Sov. Studies Phil.* **9**, 203–236 (1970/71). [1110]
- Kyuno, S. (1979)**, An inductive algorithm to construct finite lattices, *Math. Comp.* **33**, 409–421. [1111]
- Lahti, P. J. (1979)**, On the expectation values of an observable in quantum logic, *Bull. Acad. Polon. Sci., Sér. Sci. Math. Astr. et Phys.* **27**, 631–636. [1112]
- Lahti, P. J. (1980)** see Bugajski, S. and P. J. Lahti (1980).
- Lahti, P. J. (1980a)**, Uncertainty and complementarity in axiomatic quantum mechanics, *Int. J. Theor. Phys.* **19**, 789–842. [1113]
- Lahti, P. J. (1980b)**, Characterization of quantum logics, *Int. J. Theor. Phys.* **19**, 905–923. [1114]

- Lahti, P. J. (1980c)**, Uncertainty principle and complementarity in axiomatic quantum mechanics, *Rep. Math. Phys.* **17**, 287–298. [1115]
- Lahti, P. (1981)**, On the inter-relations of the three quantal principles, in **Erice79**, pp. 447–454. [1116]
- Lahti, P. J. (1983)**, Hilbertian quantum theory as a theory of complementarity, *Int. J. Theor. Phys.* **22**, 911–929. [1117]
- Lahti, P. J. (1985)**, Uncertainty, complementarity, and commutativity, in **Cologne84**, pp. 45–59. [1118]
- Lahti, P. J. (1985a)**, On the role of projection postulate in quantum theory, *Rep. Math. Phys.* **21**, 267–280. [1119]
- Lahti, P. J. (1985b)**, A coherent superposition principle and the Hilbertian quantum theory, *Rep. Math. Phys.* **22**, 49–62. [1120]
- Lahti, P. J. (1985c)** see Busch, P. and P. J. Lahti (1985).
- Lahti, P. J. (1986)**, States of minimal uncertainty and maximal information for position and momentum observables in quantum theory, *Rep. Math. Phys.* **23**, 289–296. [1121]
- Lahti, P. J. and S. Bugajski (1985)**, Fundamental principles of quantum theory. II. From a convexity scheme to the DHB theory, *Int. J. Theor. Phys.* **24**, 1051–1080. [1122]
- Lahti, P. and P. Mittelstaedt (1985)** (eds.), *Symposium on the foundations of modern physics. 50 years of the Einstein-Podolsky-Rosen Gedankenexperiment*, [Proceedings of the Symposium held in **Joensuu**, Finland, June 16–20, 1985], World Scientific, Singapore. [1123]
- Lahti, P. and P. Mittelstaedt (1987)** (eds.), *Symposium on the foundations of modern physics. The Copenhagen interpretation 60 years after the Como lecture*, [Proceedings of the Symposium held in **Joensuu**, Finland, August 6–8, 1987], World Scientific, Singapore. [1124]
- Lakser, H. (1973)** see Grätzer, G., B. Jónsson, and H. Lakser (1973).
- Landsberg, P. T. (1947)**, An algebra of observables, *Phil. Magazine J. Sci.* **38**, 757–773. [1125]
- Länger, H. (1983)** see Dorninger, D., H. Länger, and M. Mączyński (1983).
- Länger, H. (1983a)**, A groupoid–theoretic approach to axiomatic quantum mechanics, in **Klagenfurt82**, pp. 239–256. [1126]
- Länger, H. (1983b)**, Klassen von Baer $*$ –Halbgruppen und orthomodularen Verbänden, *Österreich. Akad. Wiss. Math.–Natur. Kl. Sitzungsber.* **II 192**, 17–24. [1127]
- Länger, H. (1986)**, A characterization of modularity and orthomodularity, *Algebra Universalis*, **22**, 97–98. [1128]
- Länger, H. and M. Mączyński (1988)**, An order–theoretical characterization of spectral measures, in Dorninger, D., G. Eigenthaler, H. K. Kaiser, and W. B. Müller (eds.), *Contributions to general algebra 6. Dedicated to the memory of Wilfried Nöbauer*, Hölder–Pichler–Tempsky / Teubner, Wien / Stuttgart (1988), pp. 181–188. [1129]

- Latzer, R. W. (1974)**, Errors in the no hidden variable proof of Kochen and Specker, *Synthese*, **29**, 331–372; Reprinted in **Suppes76**, pp. 323–364. [1130]
- Leininger, C. W. (1969)**, Concerning some proposal for quantum logic, *Notre Dame J. Formal Logic*, **10**, 95–96. [1131]
- Lenard, A. (1974)**, A remark on the Kochen–Specker theorem, in Enz, C. P. and J. Mehra (eds.), *Physical reality and mathematical description*, D. Reidel, Dordrecht–Holland (1974), pp. 226–233. [1132]
- Lenk, H. (1969)**, Philosophische Kritik an Begründungen von Kvantenlogik, *Phil. Naturalis*, **11**, 413–425. [1133]
- Leutola, K. and J. Nieminen (1983)**, Posets and generalized lattices, *Algebra Universalis*, **16**, 344–354. [1134]
- Lewis, J. T. (1970)** see Davies, E. B. and J. T. Lewis (1970).
- Lock, P. F. and G. M. Hardegree (1985)**, Connections among quantum logics. Part I. Quantum propositional logics, *Int. J. Theor. Phys.* **24**, 43–53. [1135]
- Lock, P. F. and G. M. Hardegree (1985a)**, Connections among quantum logics. Part II. Quantum event logics, *Int. J. Theor. Phys.* **24**, 55–61. [1136]
- Lock, P. F. and Lock, R. H. (1984)**, Tensor product of generalized sample spaces, *Int. J. Theor. Phys.* **23**, 629–641. [1137]
- Lock, R. H. (1984)** see Lock, P. F. and Lock, R. H. (1984).
- Lock, R. H. (1986)**, The tensor product of operational logics, *Canad. J. Math.* **38**, 1065–1080. [1138]
- Lock, R. H. (1990)**, The tensor product of generalized sample spaces which admit a unital set of dispersion-free weights, *Found. Phys.* **20**, 477–498. [1139]
- Logika kvantovoï mehaniki (1986)**, [Universitetskya nauchnaya konferenciya, MGU, 26–27 dekabra 1986g; A conference held at the **Moscow** State University ‘Lomonosov,’ December 26–27, 1986], Moskovskii gosudarstvenyiï universitet im. M. V. Lomonosova, Filosofskii fakultet, Kafedra logiki (1986). (A collection of short abstracts in Russian without further references). [1140]
- Logli, A. (1988)** see Cantoni, V. and A. Logli (1988).
- Lomecky, Z. (1985)** see Gross, H., Z. Lomecky, and R. Schuppli (1985).
- Long, Le Ba (1990)**, On a representation of observables in fuzzy quantum posets, in **Ján90**, pp. 132–138. [1141]
- Loomis, L. H. (1947)**, On the representation of σ -complete Boolean algebras, *Bull. Am. Math. Soc.* **53**, 757–760. [1142]
- Loomis, L. H. (1955)**, The lattice theoretic background of the dimension theory of operator algebras, *Memoirs Am. Math. Soc.* **18**, 1–36. [1143]
- Lopes, J. L. and M. Paty (1977)** (eds.), *Quantum mechanics a half century later. Papers of a colloquium on fifty years of quantum mechanics, held at the University Louis Pasteur, Strasbourg*, May 2–4, 1974, D. Reidel, Dordrecht–Holland. [1144]
- Loś, J. (1963)**, Semantic representation of the probability of formulas in formalized theories, *Studia Logica*, **14**, 183–196; Reprinted in **Hooker75I**, pp. 205–219. [1145]
- Lowdesnlager, D. B. (1957)**, On postulates for general quantum mechanics, *Proc. Am. Math. Soc.* **8**, 88–91. [1146]
- Loyola77,79** see Marlow, A. R. (1978,80a).

- Lubkin, E. (1976), Quantum logic, convexity, and a necker-cube experiment, in **Ontario73III**, pp. 145–153. [1147]
- Ludwig, G. (1954), *Die Grundlagen der Quantenmechanik*, Springer-Verlag, Berlin. [1148]
- Ludwig, G. (1964), Versuch einer axiomatischen Grundlegung der Quantenmechanik und allgemeiner physikalischer Theorien, *Z. Phys.* **181**, 233–260. [1149]
- Ludwig, G. (1967), Attempt of an axiomatic foundation of quantum mechanics and more general theories. II, *Commun. Math. Phys.* **4**, 331–348. [1150]
- Ludwig, G. (1967a), Hauptsätze über das Messen als Grundlage der Hilbert-Raum-Struktur der Quantenmechanik, *Z. Naturforsch.* **22 A**, 1303–1323. [1151]
- Ludwig, G. (1967b), Ein weiterer Hauptsatz über das Messen als Grundlage der Hilbert-Raum-Struktur der Quantenmechanik, *Z. Naturforsch.* **22 A**, 1324–1327. [1152]
- Ludwig, G. (1968), Attempt of an axiomatic foundation of quantum mechanics and more general theories. III, *Commun. Math. Phys.* **9**, 1–12. [1153]
- Ludwig, G. (1971), *Deutung des Begriffs ‘physikalische Theorie’ und axiomatische Grundlegung der Hilbert-Raum-Struktur der Quantenmechanik durch Hauptsätze des Messens*, *Lecture Notes in Physics* **23**, Springer-Verlag, Berlin. [1154]
- Ludwig, G. (1971a), The measuring process and an axiomatic foundation of quantum mechanics, in **Fermi70**, pp. 287–315. [1155]
- Ludwig, G. (1972), An improved formulation of some theorems and axioms in the axiomatic foundation of the Hilbert space structure of quantum mechanics, *Commun. Math. Phys.* **26**, 78–86. [1156]
- Ludwig, G. (1973), Why a new approach to found quantum theory?, in **Trieste72**, pp. 702–708. [1157]
- Ludwig, G. (1974), Measuring and preparing processes, in **Marburg73**, pp. 122–162. [1158]
- Ludwig, G. (1977), A theoretical description of single microsystems, in Price, W. C. and S. S. Chissick (eds.), *The uncertainty principle and foundations of quantum mechanics: A fifty years’ survey*, John Wiley & Sons, New York (1977), pp. 189–226. [1159]
- Ludwig, G. (1978), *Die Grundstrukturen einer physikalischen Theorie*, Springer-Verlag, Berlin. [1160]
- Ludwig, G. (1980), Das Problem der Ja-Nein Messung in der Quantenmechanik, in **Cologne78**, pp. 9–21. [1161]
- Ludwig, G. (1981), Quantum theory as a theory of interactions between microscopic systems which can be described objectively, *Erkenntnis*, **16**, 359–387. [1162]
- Ludwig, G. (1981a), Eigenschaften und Pseudoeigenschaften von Mikrosystemen, in Nitsch, J., J. Pfarr, und E. -W. Stachow (1981), pp. 217–242. [1163]
- Ludwig, G. (1981b), An axiomatic basis of quantum mechanics, in **Marburg79**, pp. 49–70. [1164]
- Ludwig, G. (1983,85), *Foundations of quantum mechanics. I, II*, [A translation of Ludwig, G. (1954)], Springer-Verlag, New York. [1165]

- Ludwig, G. (1985a)**, *An axiomatic basis for quantum mechanics*, Vol. 1, *Derivation of Hilbert space structure*, Springer–Verlag, New York. [1166]
- Ludwig, G. (1985b)**, Construction of a formal language and logic “a priori” and “a posteriori”, in **Cologne84**, pp. 105–110. [1167]
- Ludwig, G. (1987)**, *An axiomatic basis for quantum mechanics*, Vol. 2, *Quantum mechanics and macrosystems*, Springer–Verlag, New York. [1168]
- Ludwig, G. (1987a)**, An axiomatic basis as the desired form of a physical theory, in **Moscow87**, Vol. 2, pp. 6–8. [1169]
- Ludwig, G. (1989)**, Atoms: Are they real or are they objects?, *Found. Phys.* **19**, 971–983. [1170]
- Ludwig, G. (1990)**, Concepts of states in physics, *Found. Phys.* **20**, 621–633. [1171]
- Ludwig, G. (1990a)**, *Les structures de base d’une théorie physique*, [A translation of **Ludwig, G. (1978)**], Springer–Verlag, Berlin. [1172]
- Ludwig, G. and H. Neumann (1981)**, Connections between different approaches to the foundations of quantum mechanics, in **Marburg79**, pp. 133–143. [1173]
- Lungarzo, C. A. (1978)**, Topologies on quantum logics induced by the set, *Bull. Polish Acad. Sci. Ins. Phil. Sociol. Bull. Sect. Logic* **7**, 191–197. [1174]
- Lutterová, T. and S. Pulmannová (1985)**, An individual ergodic theorem on the Hilbert space logic, *Math. Slovaca*, **35**, 361–371. [1175]
- Mackey, G. (1944)** see Kakutani, S. and G. Mackey (1944).
- Mackey, G. W. (1945)**, On infinite dimensional linear spaces, *Trans. Am. Math. Soc.* **57**, 155–207. [1176]
- Mackey, G. (1946)** see Kakutani, S. and G. Mackey (1946).
- Mackey, G. W. (1957)**, Quantum mechanics and Hilbert space, *Am. Math. Monthly*, **64**, 45–57. [1177]
- Mackey, G. W. (1963)**, *The mathematical foundations of quantum mechanics. A lecture–note volume*, W. A. Benjamin, New York. [1178]
- MacLaren, M. D. (1964)**, Atomic orthocomplemented lattices, *Pacif. J. Math.* **14**, 597–612. [1179]
- MacLaren, M. D. (1965)**, Nearly modular orthocomplemented lattices, *Trans. Am. Math. Soc.* **114**, 401–416. [1180]
- Mączyński, M. (1967)**, A remark on Mackey’s axiom system for quantum mechanics, *Bull. Acad. Polon. Sci., Sér. Sci. Math. Astr. et Phys.* **15**, 583–587. [1181]
- Mączyński, M. (1970)**, Quantum families of Boolean algebras, *Bull. Acad. Polon. Sci., Sér. Sci. Math. Astr. et Phys.* **18**, 93–96. [1182]
- Mączyński, M. (1971)**, Boolean properties of observables in axiomatic quantum mechanics, *Rep. Math. Phys.* **2**, 135–150. [1183]
- Mączyński, M. (1971a)**, On representing observables in axiomatic quantum mechanics by point mappings, *Bull. Acad. Polon. Sci., Sér. Sci. Math. Astr. et Phys.* **19**, 335–339. [1184]
- Mączyński, M. (1971b)**, Probability measures on a Boolean algebra, *Bull. Acad. Polon. Sci., Sér. Sci. Math. Astr. et Phys.* **19**, 849–852. [1185]
- Mączyński, M. (1972)**, Hilbert space formalism of quantum mechanics without the Hilbert space axiom, *Rep. Math. Phys.* **3**, 209–219. [1186]

- Mączyński, M. (1973), The orthogonality postulate in axiomatic quantum mechanics, *Int. J. Theor. Phys.* **8**, 353–360. [1187]
- Mączyński, M. (1973a), The field of real numbers in axiomatic quantum mechanics, *J. Math. Phys.* **14**, 1469–1471. [1188]
- Mączyński, M. (1973b), On a functional representation of the lattice of projections on a Hilbert space, *Studia Math.* **47**, 253–259. [1189]
- Mączyński, M. (1974), Functional properties of quantum logics, *Int. J. Theor. Phys.* **11**, 149–156. [1190]
- Mączyński, M. (1974a), When the topology of an infinite-dimensional Banach space coincides with a Hilbert space topology?, *Studia Math.* **44**, 149–152. [1191]
- Mączyński, M. (1974b), On a lattice characterization of Hilbert spaces, *Colloq. Math.* **31**, 243–248. [1192]
- Mączyński, M. (1975), σ -orthodistributivity in σ -orthocomplemented partially ordered sets, *Bull. Acad. Polon. Sci., Sér. Sci. Math. Astr. et Phys.* **23**, 231–236. [1193]
- Mączyński, M. (1976), Orthomodularity and lattice characterization of Hilbert spaces, *Bull. Acad. Polon. Sci., Sér. Sci. Math. Astr. et Phys.* **24**, 481–484. [1194]
- Mączyński, M. (1977), A remark on Mackey's problem about modular pairs and completeness, *Bull. Acad. Polon. Sci., Sér. Sci. Math. Astr. et Phys.* **25**, 27–31. [1195]
- Mączyński, M. (1978), A generalization of A. Horn and A. Tarski's theorem on weak σ -distributivity, *Demonstratio Math.* **11**, 215–223. [1196]
- Mączyński, M. (1981), Comutativity and generalized transition probability in quantum logic, in **Erice79**, pp. 355–364. [1197]
- Mączyński, M. (1981a), A numerical characterization of commuting projections in Hilbert spaces, *Bull. Acad. Polon. Sci., Sér. Sci. Math. Astr. et Phys.* **29**, 157–163. [1198]
- Mączyński, M. (1983) see Dorninger, D., H. Länger, and M. Mączyński (1983).
- Mączyński, M. (1983a), A functional characterization of inner product vector spaces, *Demonstratio Math.* **16**, 797–803. [1199]
- Mączyński, M. (1985), A theorem on simultaneous verification of sequences of propositions in quantum logic, in **Cologne84**, pp. 329–336. [1200]
- Mączyński, M. (1985a), An abstract derivation of the inequality related to Heisenberg uncertainty principle, *Rep. Math. Phys.* **21**, 281–290. [1201]
- Mączyński, M. (1988), Orthomodularity in partially ordered vector spaces, *Bull. Polish Acad. Sci. Math.* **36**, 299–306. [1202]
- Mączyński, M. (1988a) see Länger, H. and M. Mączyński (1988).
- Mączyński, M. (1988b), Generalized Riesz spaces with orthomodular basis, in **Ján88**, pp. 72–76. [1203]
- Mączyński, M. and T. Traczyk (1973), A characterization of orthomodular partially ordered sets admitting a full set of states, *Bull. Acad. Polon. Sci., Sér. Sci. Math. Astr. et Phys.* **21**, 3–8. [1204]
- Mączyński, M. and T. Traczyk (1975), Some representations of orthomodular and similar posets, *Acta Fac. Rerum Natur. Univ. Comenian. – Math. Special No.*, pp. 25–28. [1205]

- Maeda, F. (1950), Representation of orthomodular lattices, *J. Sci. Hiroshima Univ.* **14**, 93–96. [1206]
- Maeda, F. and S. Maeda (1970), *Theory of symmetric lattices*, Springer–Verlag, Berlin. [1207]
- Maeda, S. (1955), Dimension functions on certain general lattices, *J. Sci. Hiroshima Univ.* **A 19**, 211–237. [1208]
- Maeda, S. (1958), On the lattice of projections of a Baer $*$ -ring, *J. Sci. Hiroshima Univ.* **A 24**, 509–525. [1209]
- Maeda, S. (1960), On relatively semiorthocomplemented lattices, *J. Sci. Hiroshima Univ.* **A 24**, 155–161. [1210]
- Maeda, S. (1960a), On a ring whose principal right ideals generated by idempotents form a lattice, *J. Sci. Hiroshima Univ.* **A 24**, 508–525. [1211]
- Maeda, S. (1961), Dimension theory on relatively semiorthocomplemented complete lattices, *J. Sci. Hiroshima Univ.* **A 25**, 369–404. [1212]
- Maeda, S. (1965), On the symmetry of the modular relation in atomic lattices, *J. Sci. Hiroshima Univ.* **A 29**, 165–170. [1213]
- Maeda, S. (1966), On conditions for the orthomodularity, *Proc. Japan Acad.* **42**, 247–251. [1214]
- Maeda, S. (1967), On atomic lattices with the covering property, *J. Sci. Hiroshima Univ.* **A 31**, 105–121. [1215]
- Maeda, S. (1970) see Maeda, F. and S. Maeda (1970).
- Maeda, S. (1975), On $*$ -rings satisfying the square root axiom, *Proc. Am. Math. Soc.* **52**, 188–190. [1216]
- Maeda, S. (1976), Independent complements in lattices, *Coll. Math. Soc. János Bolyai*, **14**, 215–226. [1217]
- Maeda, S. (1976a), On arcs in the space of projections of C^* -algebra, *Math. Japonica* **21**, 371–374. [1218]
- Maeda, S. (1977), On the distance between two projections in a C^* -algebra, *Math. Japonica* **22**, 61–65. [1219]
- Maeda, S. (1980), *Lattice theory and quantum logic, (in Japanese)*, Maki–Shoten, Tokyo. [1220]
- Maeda, S. (1981), On finite–modular atomistic lattices, *Algebra Universalis*, **12**, 76–80. [1221]
- Maeda, S. (1984) see Thakare, N. K., M. P. Wasadikar, and S. Maeda (1984).
- Maeda, S. (1985), On distributive pairs in lattices, *Acta Math. Hung.* **45**, 133–140. [1222]
- Maeda, S. (1985a), Linear extension of probability measures on projections, *Abstract of a lecture given in the Conference on operator algebras at Nakatsugawa, Gifu, Japan, Nov. 1985.* [1223]
- Maeda, S. (1990), Probability measures on projections in von Neumann algebras, *Rev. Math. Phys.* **1**, 235–290. [1224]
- Maeda, S. and S. S. Holland, Jr. (1976), Equivalence of projections in Baer $*$ -rings, *J. Algebra*, **39**, 150–159. [1225]
- Maeda, S., N. K. Thakare, and M. P. Wasadikar (1985), On the “del” relation in join–semilattices, *Algebra Universalis*, **20**, 229–242. [1226]

- Majewski, M. (1978)**, On some matrix of the Birkhoff and v. Neumann quantum logic, *Bull. Polish Acad. Sci. Ins. Phil. Sociol. Bull. Sect. Logic* **7**, 133–136. [1227]
- Malhas, O. Q. (1987)**, Quantum logic and the classical propositional calculus, *J. Symb. Logic*, **52** 834–841. [1228]
- Maňasová, V. (1981)**, A note on mappings between the logics of quantum systems, *Acta Polytechnica Práce ČVUT Praha, Ser. IV, No. 10*, 23–26. [1229]
- Maňasová, V. and P. Pták (1981)**, On states on the product of logics, *Int. J. Theor. Phys.* **20**, 451–456. [1230]
- Maňasová, V. and P. Pták (1981a)**, On three questions of quantum system theories, *Acta Polytechnica Práce ČVUT Praha, Ser. IV, No 10*, 27–39. [1231]
- Manià, A. (1974)** see Cattaneo, G. and A. Manià (1974).
- Manià, A. (1981,81a,84,85)** see Abbati, M. and A. Manià (1981,81a,84,85).
- Marbeau, J. and S. Gudder (1989)**, A quantum random walk, *Ann. Fond. L. de Broglie*, **14**, 436–459. [1232]
- Marbeau, J. and S. Gudder (1990)**, Analysis of a quantum Markov chain, *Ann. Inst. Henri Poincaré*, **52 A**, 31–50. [1233]
- Marburg73** see Hartkämper, A. and H. Neumann (1974).
- Marburg79** see Neumann, H. (1981).
- Marchand, J.-P. (1972,77)** see Gudder, S. and J.-P. Marchand (1972,77).
- Marchand, J.-P. (1977a)**, Relative coarse-graining, *Found. Phys.* **7**, 35–49. [1234]
- Marchand, J.-P. (1978)** see Benoist, R. W., J.-P. Marchand, and W. Yourgrau (1978).
- Marchand, J.-P. (1980)** see Gudder, S. and J.-P. Marchand (1980).
- Marić, Z. (1981)** see Kron, A., Z. Marić, and S. Vujošević (1981).
- Marino, G. (1984,86,88)** see Cattaneo, G. and G. Marino (1984–88).
- Marino, G. (1987)** see Cattaneo, G., G. Franco, and G. Marino (1987).
- Markechová, D. (1989)**, The entropy of fuzzy dynamical systems, *Bull. Sous-Ensembl. Flous Appl.* **38**, 38–41. [1235]
- Markechová, D. (1989a)**, Isomorphism and conjugation of fuzzy dynamical systems, *Bull. Sous-Ensembl. Flous Appl.* **38**, 94–101. [1236]
- Markechová, D. (1990)**, The entropy of F -quantum spaces, *Math. Slovaca*, **40**, 177–190. [1237]
- Markechová, D. (1990a)**, On entropy and generators of F -dynamical systems, in **Ján90**, pp. 139–145. [1238]
- Marlow, A. R. (1974)**, Implications of a new axiom set for quantum logic, in **Cohen, R. S. and M. W. Wartofsky (1974)**, pp. 350–360. [1239]
- Marlow, A. R. (1978)** (ed.), *Mathematical foundations of quantum theory*, (Papers from a conference held at **Loyola** University, New Orleans, June 2–4, 1977), Academic Press, New York. [1240]
- Marlow, A. R. (1978a)**, Orthomodular structures and physical theory, in **Loyola77**, pp. 59–69.
- Marlow, A. R. (1978b)**, Quantum theory and Hilbert lattice, *J. Math. Phys.* **19**, 1841–1846. [1241]
- Marlow, A. R. (1980)**, Empirical topology: Topologies from partially ordered sets, *Int. J. Theor. Phys.* **19**, 515–521. [1242]

- Marlow, A. R. (1980a)** (ed.), *Quantum theory and gravitation*, (Proceedings of a symposium held at **Loyola** University, New Orleans, May 23–26, 1979), Academic Press, New York. [1243]
- Marlow, A. R. (1980b)**, An axiomatic general relativistic quantum theory, in **Loyola79**, pp. 35–69. [1244]
- Marlow, A. R. (1980c)**, An extended quantum mechanical embedding theorem, in **Loyola79**, pp.71–77. [1245]
- Marlow, A. (1981)**, Space time structure for quantum logic, in **Erice79**, pp. 413–418. [1246]
- Marlow, A. R. (1981a)**, Quantum spacetime, in **Tutzing80**, pp. 184–200. [1247]
- Marsden Jr., E. L. (1969)**, Irreducibility conditions on orthomodular lattices, *Caribbean J. Sci. Math.* **1**, 27–39. [1248]
- Marsden Jr., E. L. (1970)**, The commutator and solvability in a generalized orthomodular lattice, *Pacif. J. Math.* **33**, 357–361. [1249]
- Marsden Jr., E. L. (1973)**, A note on implicative models, *Notre Dame J. Formal Logic*, **14**, 139–144. [1250]
- Marsden, E. L. (1973a)**, Distribution in orthomodular lattices, *Notices Am. Math. Soc.* **20**, A–51. [1251]
- Marsden, E. L. (1975)** see Herman, L., E. L. Marsden, and R. Piziak (1975).
- Martens, H. and W. M. de Muynck (1990)**, Nonideal quantum measurements, *Found. Phys.* **20**, 255–281. [1252]
- Martin, C. K. (1969)** see Bevis, J. and C. K. Martin (1969).
- Martinez, S. (1990)**, A search for the physical content of Lüders' rule, *Synthese*, **82**, 97–125. [1253]
- Matolcsi, T. (1975)**, Tensor product of Hilbert lattices and free orthodistributive product of orthomodular lattices, *Acta Sci. Math. Szeged.* **37**, 263–272. [1254]
- Matveičuk, M. S. (1980)**, Odná teorema o sostoianiah na kvantovyh logikah, *Teor. i mat. fizika*, **45**, 244–250. [1255]
- Matveičuk, M. S. (1988)**, Finite measures on quantum logics, in **Ján88**, 77–81. [1256]
- Matveičuk, M. S. (1990)**, The Gleason and Jordan theorems on hyperbolic quantum logics, in **Ján90**, , pp. 147–150. [1257]
- Mayet, R. (1982)**, Une dualité pour les ensembles ordonnés orthocomplémentés, *C. R. Acad. Sci. Paris*, **294**, Sér. I, 63–65. [1258]
- Mayet, R. (1984)** see Carrega, J.-C., G. Chavalier, and R. Mayet (1984).
- Mayet, R. (1985)**, Varieties of orthomodular lattices related to states, *Algebra Universalis*, **20**, 368–396. [1259]
- Mayet, R. (1986)**, Equational basis for some varieties of orthomodular lattices related to states, *Algebra Universalis*, **23**, 167–195. [1260]
- Mayet, R. (1990)** see Carrega, J.-C., G. Chavalier, and R. Mayet (1990).
- Mayet, R. (1990a)**, Orthosymmetric ortholattices, *Proc. Am. Math. Soc.* (to appear). [1261]
- Mayet, R. and M. Roddy (1987)**, n–distributivity in ortholattices, in *Contribution to general algebra*, Hölder–Pichler–Tempisky, Vienna (1987), pp. 285–294. [1262]

- Mayr, D. (1981), Comments on Putnam's 'Quantum mechanics and the observer,' *Erkenntnis*, **16**, 221–225. [1263]
- McCollum, G. (1975) see Finkelstein, D. and G. McCollum (1975).
- McGrath, J. H. (1978), Only if quanta had logic, in **PSA78**, Vol. I, pp. 268–276. [1264]
- McGrath, J. H. (1978a), A formal statement of the Einstein–Podolsky–Rosen argument, *Int. J. Theor. Phys.* **17**, 557–571. [1265]
- McGrath, J. H. (1978b), Review of Hooker's *The logico-algebraic approach to quantum mechanics*, Vol. I. Historical evolution, *Phil. Sci.* **45**, 145–148. [1266]
- McKinsey, J. C. C. (1954) see Suppes, P. and J. C. C. McKinsey (1954).
- Mehra, J. (1970) see Sudarshan, E. C. G. and J. Mehra (1970).
- Mehra, J. (1973) (ed.), *The physicist's conception of nature*, [Proceedings of symposium held at Miramare, Trieste, Italy, September 18–25, 1972], Reidel, Dordrecht. [1267]
- Melsheimer, O. (1983), Quantum statistical mechanics as a construction of an embedding scheme, *Found. Phys.* **13**, 745–758. [1268]
- Merwe, van der, A. see van der Merwe, A.
- Mesiar, R. (1990) see Kolesárová, A. and R. Mesiar (1990).
- Meskov, V. S. (1972) see Pyatnitsyn, V. N. and V. S. Meskov (1972).
- Meskov, V. S. (1986), *Očerki po logike kvantovoï mehaniki*, Izdatel'stvo Moskovskogo universiteta, Moscow. [1269]
- Metelli, P. A. (1982) see Dalla Chiara, M. L. and P. A. Metelli (1982).
- Meyer, P. D. (1970), An orthomodular poset which does not admit a normed ortho-valuation, *Bull. Austral. Math. Soc.* **3**, 163–170. [1270]
- Meyer, P. J. G. (1974), On the structure of orthomodular posets, *Discrete Math.* **9**, 119–146. [1271]
- Meyer, R. K. (1985) see Mortenson, C. and R. K. Meyer (1985).
- Michel, J. R. (1979,81) see Gudder, S. P. and J. R. Michel (1979,81).
- Mielnik, B. (1968), Quantum logic and evolution, *Ann. Inst. Henri Poincaré*, **9 A**, 1–5. [1272]
- Mielnik, B. (1968a), Geometry of quantum states, *Commun. Math. Phys.* **9**, 55–80. [1273]
- Mielnik, B. (1969), Theory of filters, *Commun. Math. Phys.* **15**, 1–46. [1274]
- Mielnik, B. (1974), Generalized quantum mechanics, *Commun. Math. Phys.* **37**, 221–256; Reprinted in **Hooker79**, pp. 115–152. [1275]
- Mielnik, B. (1976), Quantum logic: Is it necessarily orthocomplemented?, in **Flato et al. (1976)**, pp. 117–135. [1276]
- Mielnik, B. (1980), Mobility of nonlinear systems, *J. Math. Phys.* **21**, 44–54. [1277]
- Mielnik, B. (1981a), Motion and form, in **Erice79**, pp. 465–477. [1278]
- Mielnik, B. (1990), The paradox of two bottles in quantum mechanics, *Found. Phys.* **20**, 745–755. [1279]
- Mielnik, B. and G. Tengstrand (1980), Nelson–Brown motion: Some question marks, *Int. J. Theor. Phys.* **19**, 239–250. [1280]
- Miller, F. R. (1974) see Gerelle, E. G. R., R. J. Greechie, and F. R. Miller (1974).

- Minari, P. (1987)**, On the algebraic and the Kripkean logical consequence relation for orthomodular quantum logic, *Rep. Math. Logic*, **21**, 47–54. [1281]
- Mišik, L. (1988)** see Dvurečenskij, A. and L. Mišik (1988). [1282]
- Misra, B. (1974)**, On a new definition of quantal states, in Enz, C. P. and J. Mehra (eds.), *Physical reality and mathematical description*, D. Reidel, Dordrecht–Holland (1974), pp. 455–476. [1283]
- Mitanni, S. (1987)**, Inferences of the logic of a complete orthomodular lattice, *Bull. Univ. Osaka Prefect.* **A 36**, 53–59. [1284]
- Mittelstaedt, P. (1959)**, Untersuchungen zur Quantenlogik, *Sitzungsberichte Bayer. Akad. Wiss. Munchen* (1959), 321–386. [1285]
- Mittelstaedt, P. (1960)**, Über die Gültigkeit der Logik in der Natur, *Naturwiss.* **47**, 385–391. [1286]
- Mittelstaedt, P. (1961)**, Quantenlogik, *Fortschr. Phys.* **9**, 106–147. [1287]
- Mittelstaedt, P. (1968)**, Verborgene Parameter und beobachtbare Größen in physikalischen Theorien, *Phil. Naturalis*, **10**, 468–482; Reprinted in **Mittelstaedt, P. (1972a)**, pp. 462–482. [1288]
- Mittelstaedt, P. (1970)**, Quantenlogische Interpretation orthokomplementärer quasimodularer Verbände, *Z. Naturforsch.* **25 A**, 1773–1778. [1289]
- Mittelstaedt, P. (1972)**, On the interpretation of the lattice of subspaces of the Hilbert space as a propositional calculus, *Z. Naturforsch.* **27 A**, 1358–1362. [1290]
- Mittelstaedt, P. (1972a)**, *Philosophische Probleme der modernen Physik*, Bibliographisches Institut, Mannheim. [1291]
- Mittelstaedt, P. (1972b)**, *Die Sprache der Physik*, Bibliographisches Institut, Mannheim. [1292]
- Mittelstaedt, P. (1976)**, Quantum logic, in **PSA74**, pp. 501–514; Reprinted in **Hooker79**, pp 153–166. [1293]
- Mittelstaedt, P. (1976a)**, On the applicability of the probability concept to quantum theory, in **Ontario73III**, pp. 155–167. [1294]
- Mittelstaedt, P. (1976b)**, *Philosophical problems of modern physics*, [A translation of **Mittelstaedt, P. (1972a)**], D. Reidel, Dordrecht–Holland. [1295]
- Mittelstaedt, P. (1977)**, Time dependent propositions and quantum logic, *J. Phil. Logic*, **6**, 463–472. [1296]
- Mittelstaedt, P. (1978)**, The metalogic of quantum logic, in **PSA78**, *Vol. 1*, pp. 249–256. [1297]
- Mittelstaedt, P. (1978a)**, *Quantum logic*, D. Reidel, Dordrecht–Holland. [1298]
- Mittelstaedt, P. (1979)**, Quantum logic, in **Fermi77**, pp. 264–299. [1299]
- Mittelstaedt, P. (1979a)**, The modal logic of quantum logic, *J. Phil. Logic*, **8**, 479–504. [1300]
- Mittelstaedt, P. (1980)**, Die Meta-Logik der Quantenlogik, in **Cologne78**, 59–71. [1301]
- Mittelstaedt, P. (1981)**, Classification of different areas of work afferent to quantum logic, in **Erice79**, pp. 3–16. [1302]
- Mittelstaedt, P. (1981a)**, The dialogic approach to modalities in the language of quantum physics, in **Erice79** pp. 259–281. [1303]

- Mittelstaedt, P. (1981b)**, The concepts of truth, possibility, and probability in the language of quantum mechanics, in **Marburg79**, pp. 71–94. [1304]
- Mittelstaedt, P. (1983)**, Analysis of the EPR–experiment by relativistic quantum logic, in **Tokyo83**, pp. 251–255. [1305]
- Mittelstaedt, P. (1983a)**, Relativistic quantum logic, *Int. J. Theor. Phys.* **22**, 293–314. [1306]
- Mittelstaedt, P. (1983b)**, Naming and identity in quantum logic, in **Salzburg83**, pp. 138–142. [1307]
- Mittelstaedt, P. (1983c)**, Quantum logic and relativistic space–time, in **Tutzing82**, pp. 54–81. [1308]
- Mittelstaedt, P. (1985)**, Constituting, naming, and identity in quantum logic, in **Cologne84**, pp. 215–234. [1309]
- Mittelstaedt, P. (1985a)**, EPR-paradox, quantum logic, and relativity, in **Joensuu85**, pp. 171–186. [1310]
- Mittelstaedt, P. (1986)**, Empiricism and apriorism in the foundations of quantum logic, *Synthese*, **67**, 497–525. [1311]
- Mittelstaedt, P. (1986a)**, Quantum logical analysis of delayed–choice experiments, in **Tokyo86**, pp. 53–58. [1312]
- Mittelstaedt, P. (1987)**, Language and reality in quantum physics, in **Joensuu87**, pp. 229–250. [1313]
- Mittelstaedt, P. (1989)** see Giuntini, R. and P. Mittelstaedt (1989).
- Mittelstaedt, P. (1990)**, The interrelation between language and reality in quantum mechanics, *Nuova Critica*, **I–II**, (*Nuova Serie*), *Quaderno 13–14*, 89–107. [1314]
- Mittelstaedt, P. and J. Pfarr (1980)** (eds.), *Grundlagen der Quantentheorie. Vorträge eines Kolloquiums über wissenschaftstheoretische Probleme der Quantentheorie, Köln, 4. bis 6. Oktober 1978*, [Proceedings of a symposium held in **Cologne**, Oct. 4–6, 1978], Bibliographisches Institut, Mannheim. [1315]
- Mittelstaedt, P., A. Prieur, and R. Schieder (1987)**, Unsharp joint measurement of complementary observables in a photon split beam experiment, in **Joensuu87**, pp. 403–418. [1316]
- Mittelstaedt, P. and E.-W. Stachow (1974)**, Operational foundation of quantum logic, *Found. Phys.* **4**, 355–365. [1317]
- Mittelstaedt, P. and E.-W. Stachow (1978)**, The principle of excluded middle in quantum logic, *J. Phil. Logic*, **7**, 181–208. [1318]
- Mittelstaedt, P. and E.-W. Stachow (1983)**, Analysis of the Einstein–Podolsky–Rosen experiment by relativistic quantum logic, *Int. J. Theor. Phys.* **22**, 517–540. [1319]
- Mittelstaedt, P. and E.-W. Stachow (1985)** (eds.), *Recent developments in quantum logic*, (Proceedings of the international symposium on quantum logic, **Cologne**, Germany, June 13–16, 1984), Bibliographisches Institut, Mannheim. [1320]
- Mizerski, J., A. Posiewnik, J. Pykacz, and M. Żukowski (1990)** (eds.), *Problems in quantum physics; Gdańsk’89, Recent and future experiments and interpretations*, [Proceedings of a symposium held in Gdańsk, Poland, September 18–23, 1989], World Scientific, Singapore. [1321]

- Moldauer, P. A. (1976)**, Comment on separability and quantum logic, *Epistemological Letters*, **14**, 5. [1322]
- Monk, J. D. (1969)** see Jónsson, B. and J. D. Monk (1969).
- Morales, P. (1990)**, New results in non-commutative measure theory, in **Ján90**, pp. 156–162 [1323]
- Moran, W. (1985)** see Cooke, R., M. Keane, and W. Moran (1985).
- Morash, R. P. (1971)**, The orthomodular identity and metric completeness of the coordinatizing division ring, *Proc. Am. Math. Soc.* **27**, 446–448 + Erratum, *Ibid.* **29**, 267 (1971). [1324]
- Morash, R. P. (1972)**, Orthomodularity and the direct sum of division subrings of the quaternions, *Proc. Am. Math. Soc.* **36**, 63–68. [1325]
- Morash, R. P. (1973)**, Angle bisection and orthoautomorphism in Hilbert lattices, *Canad. J. Math.* **25**, 261–272. [1326]
- Morash, R. P. (1974)**, Remarks on the classification problem for infinite-dimensional Hilbert lattices, *Proc. Am. Math. Soc.* **43**, 42–46. [1327]
- Morash, R. P. (1975)**, Orthomodularity and non-standard constructions, *Glasnik matematički*, **10**, 231–239. [1328]
- Morash, R. P. (1976)**, The hyperoctant property in orthomodular AC-lattices, *Proc. Am. Math. Soc.* **57**, 206–212. [1329]
- Morgan, C. G. (1983)**, Probabilistic semantics for orthologic and quantum logic, *Logique et Analyse*, **26**, (103–104) 323–339. [1330]
- Moroz, B. Z. (1971)**, Formal systems that arise in the analysis of physical theories, *Doklady Akad. Nauk. SSSR*, **198**, 1018–1020. [1331]
- Moroz, B. Z. (1983)**, Reflection on quantum logic, *Int. J. Theor. Phys.* **22**, 329–340. [1332]
- Morrison, M. (1986)**, Quantum logic and the invariance argument — A reply to Bell and Hallett, *Phil. Sci.* **53**, 403–411. [1333]
- Mortenson, C. and R. K. Meyer (1985)**, Relevant quantum arithmetic, in *Mathematical logic and formal systems, Lecture Notes in Pure and Applied Mathematics, Vol. 94*, Dekker, New York (1985), pp. 221–226. [1334]
- Moscow86** see Logika kvantovoï mehaniki (1986).
- Moscow87** see Rabinovich, V. L. (1987).
- Motyka, Z. (1981)** see Bugajski, S. and Z. Motyka (1981).
- Mugur-Schächter, M. (1974)**, The quantum mechanical Hilbert space formalism and the quantum mechanical probability space of the outcomes of measurements, in **Marburg73**, pp. 288–308. [1335]
- Mugur-Schächter, M. (1980,81)** see Hadjisavvas, N., F. Thieffine, and M. Mugur-Schächter (1980,81).
- Mugur-Schächter, M. (1981a)** see Thieffine, F., N. Hadjisavvas, and M. Mugur-Schächter (1981).
- Mugur-Schächter, M. (1983)**, Elucidation of the probabilistic structure of quantum mechanics and definition of a compatible joint probability, *Found. Phys.* **13**, 419–465. [1336]
- Mukherjee, M. K. (1977)** see Sharma, C. S. and M. K. Mukherjee (1977).

- Mukherjee, M. K. (1979)**, A note on characterization of orthogonality and compatibility of elements of a quantum logic, *Portugal. Math.* **38**, 107–112. [1337]
- Mukherjee, M. K. (1981)**, A note on completeness of bounded lattices postulated in some axiomatics of the mathematical foundations of quantum theory, *Indian J. Pure Appl. Math.* **12**, 677–680. [1338]
- Mukherjee, M. K. (1984)**, A generalized characterization theorem for quantum logics, *Lett. Nuovo Cim.* **40**, 453–456. [1339]
- Müller, G.H., W. Lensky, and H.-D. Ebbinghaus (1987)** (eds.), *Ω -bibliography on mathematical logic*. Vol. II. Nonclassical logic, Springer-Verlag, New York. [1340]
- Müller, H. (1954)**, Mehrwertige Logik und Quantenphysik, *Phys. Blätter*, **10**, 151–157. [1341]
- Mullikin, H. C. (1973)** see Gudder, S. P. and H. C. Mullikin (1973).
- Murray, F. J. and J. von Neumann (1936)**, On rings of operators, *Ann. Math.* **37**, 116–229; Reprinted in von Neumann, J., *Collected works, Vol. III*, Pergamon Press, Oxford (1961), pp. 6–119. [1342]
- Murray, F. J. and J. von Neumann (1937)**, On rings of operators, II, *Trans. Am. Math. Soc.* **41**, 208–248. [1343]
- Mushtari, D. Kh. (1989)**, Logics of projectors in Banach spaces, (in Russian), *Izv. Vyssh. Uchebn. Zaved. Mat. No. 8*, 44–52. [1344]
- Nagel, E. (1945)**, Book review: *Philosophical foundations of quantum mechanics* by H. Reichenbach, *J. Phil.* **42**, 437–444. [1345]
- Nagel, E. (1946)**, Professor Reichenbach on quantum mechanics: A rejoinder, *J. Phil.* **43**, 247–250. [1346]
- Nakamura, M. (1957)**, The permutability in a certain orthocomplemented lattice, *Kodai Math. Sem. Rep.* **9**, 158–160. [1347]
- Nakano, H. and S. Romberger (1971)**, Cluster lattices, *Bull. Acad. Polon. Sci., Sér. Sci. Math. Astr. et Phys.* **19**, 5–7. [1348]
- Nánásiová, O. (1986)**, Conditional probability on a quantum logic, *Int. J. Theor. Phys.* **25**, 1155–1162. [1349]
- Nánásiová, O. (1987)**, Ordering of observables and characterization of conditional expectations, *Math. Slovaca*, **37**, 323–340. [1350]
- Nánásiová, O. and S. Pulmannová (1985)**, Relative conditional expectations on a logic, *Aplikace Matematiky*, **30**, 332–350. [1351]
- Naroditsky, V. (1981)** see Gudder, S. and V. Naroditsky (1981).
- Nash, C. G. and G. C. Joshi (1987)**, Component states of a composite quaternion system, *J. Math. Phys.* **28**, 2886–2890. [1352]
- Nasr, A. H. (1982)**, Observables measured simultaneously with the potential, *J. Math. Phys.* **23**, 2387–2388. [1353]
- Navara, M. (1984)**, Two-valued states on a concrete logic and the additivity problem, *Math. Slovaca*, **34**, 329–336. [1354]
- Navara, M. (1984a)**, The integral on σ -classes is monotonic, *Rep. Math. Phys.* **20**, 417–421. [1355]
- Navara, M. (1985)** see Bunce, L. J., M. Navara, P. Pták, and J. D. M. Wright (1985).
- Navara, M. (1987)** see Binder, J. and M. Navara (1987).

- Navara, M. (1987a), State space properties of finite logics, *Czechoslovak Math. J.* **37**, 188–196. [1356]
- Navara, M. (1988), A note on the axioms of quantum mechanics, *Acta Polytechnica Práce ČVUT Praha, Ser. IV*, **15**, No. 2, 5–8. [1357]
- Navara, M. (1988a), When is the integration on quantum probability spaces additive?, *Real Analysis Exchange*, **14**, 228–234 (1988–1989). [1358]
- Navara, M. (1988b) see Rogalewicz, V. and M. Navara (1988).
- Navara, M. (1989), Integration on generalized measure spaces, *Acta Univ. Carolin. — Math. Phys.* **30**, No. 2, 121–124. [1359]
- Navara, M. (1990) see Godowski, R. and M. Navara (1990).
- Navara, M. (1990a), Quantum logics with given automorphism groups, centres, and state spaces, in *Ján90*, pp. 163–168. [1360]
- Navara, M. and P. Pták (1983), Two-valued measures on σ -classes, *Čas. Pěst. Mat.* **108**, 225–229. [1361]
- Navara, M. and P. Pták (1983a), On the Radon–Nikodym property for σ -classes, *J. Math. Phys.* **24**, 1450. [1362]
- Navara, M. and P. Pták (1988), Quantum logics with Radon–Nikodym property, *Order*, **4**, 387–395. [1363]
- Navara, M. and P. Pták (1988a), Enlargements of logics (σ -orthocomplete case), in *Proceedings of the conference: Topology and Measure, V*, held in Binz, 1987, Wissensch. Beitr. Ernst-Moritz-Arndt Univ., Greifswald (1988), 109–115. [1364]
- Navara, M. and P. Pták (1989), Almost Boolean orthomodular posets, *J. Pure Appl. Algebra*, **60**, 105–111. [1365]
- Navara, M., P. Pták, and V. Rogalewicz (1988), Enlargements of quantum logics, *Pacif. J. Math.* **135**, 361–369. [1366]
- Navara, M. and V. Rogalewicz (1988), Construction of orthomodular lattices with given state spaces, *Demonstratio Math.* **21**, 481–493. [1367]
- Navara, M. and V. Rogalewicz (1988a), State isomorphism of orthomodular posets and hypergraphs, in *Ján88*, pp. 93–98. [1368]
- Navara, M. and V. Rogalewicz (1991), The pasting constructions for orthomodular posets, *Math. Nachr.* **154**, 157–168. [1369]
- Navara, M. and G. T. Rüttimann (1991), A characterization of σ -state spaces of orthomodular lattices, *Expositiones Mathematicae*, **9**, 275–284. [1370]
- Neubrunn, T. (1970), A note on quantum probability spaces, *Proc. Am. Math. Soc.* **25**, 672–675. [1371]
- Neubrunn, T. (1973) see Katrinak, T. and T. Neubrunn (1973).
- Neubrunn, T. (1974), On certain type of generalized random variables, *Acta Math. Univ. Comenian.* **29**, 1–6. [1372]
- Neubrunn, T. (1988), Generalized continuity and measurability, in *Ján88*, 99–101. [1373]
- Neubrunn, T. (1990,90a) see Dvurečenskij, A., T. Neubrunn, and S. Pulmannová (1990,90a).
- Neubrunn, T. and S. Pulmannová (1983), On compatibility in quantum logics, *Acta Math. Univ. Comenian.* **42–43**, 153–168. [1374]

- Neumann, H. (1971)**, Coexistent effects and observables. Seminar notes, in **Fermi70**, pp. 407–411. [1375]
- Neumann, H. (1974)**, A new physical characterisation of classical systems in quantum mechanics, *Int. J. Theor. Phys.* **9**, 225–228. [1376]
- Neumann, H. (1974a)**, The representation of classical systems in quantum mechanics, in **Marburg73**, pp. 316–321. [1377]
- Neumann, H. (1974b)**, The structure of ordered Banach spaces in axiomatic quantum mechanics, in **Marburg73**, pp. 161–121. [1378]
- Neumann, H. (1978)**, A mathematical model for a set of microsystems, *Int. J. Theor. Phys.* **17**, 219–226. [1379]
- Neumann, H. (1980)**, Zur Verdeutlichung der statistischen Interpretation der Quantenmechanik durch ein mathematisches Modell für eine Menge von Mikrosystemen, in **Cologne78**, pp. 23–27. [1380]
- Neumann, H. (1981)** (ed.), *Interpretation and foundations of quantum theory, Proceedings of a conference held in Marburg, 28–30 May 1979*, Bibliographisches Institut, Mannheim. [1381]
- Neumann, H. (1981a)** see Ludwig, G. and H. Neumann (1981).
- Neumann, H. (1981b)** see Gerstberger, H., H. Neumann, and R. Werner (1981).
- Neumann, H. (1983)**, The description of preparation and registration of physical systems and conventional probability theory, *Found. Phys.* **13** 761–778. [1382]
- Neumann, H. (1985)**, The size of sets of physically possible states and effects, in **Cologne84**, pp. 337–348. [1383]
- Neumann, H. (1985a)**, Which ideas on the action of microsystems in EPR–experiments are compatible with quantum theory?, in **Joensuu85**, pp. 497–509. [1384]
- Neumann, H. (1989)** see Klüppel, M. and H. Neumann (1989).
- Neumann, H. and R. Werner (1983)**, Causality between preparation and registration processes in relativistic quantum theory, *Int. J. Theor. Phys.* **22**, 781–802. [1385]
- Neumann, von, J.** see von Neumann, J.
- Newberger, S. M. (1973)** see Akemann, C. A. and S. M. Newberger (1973).
- Nicholson, G. E., A. Grubb, and C. S. Sharma (1984)**, Regular join endomorphisms on a complemented modular lattice of finite rank, *Discrete Math.* **52**, 235–242. [1386]
- Nieminen, J. (1983)** see Leutola, K. and J. Nieminen (1983).
- Nikodým, O. M. (1969)**, Studies of some items of the lattice theory in relation to the Hilbert–Hermite space, *Rend. Sem. Math. Univ. Padova*, **42**, 27–122. [1387]
- Nilson, D. R. (1977)**, Hans Reichenbach on the logic of quantum mechanics, *Synthese*, **34**, 313–360. [1388]
- Nishimura, H. (1980)**, Sequential method in quantum logic, *J. Symb. Logic*, **45**, 339–352. [1389]
- Nisticò, G. (1984,85,86,86a,87)** see Cattaneo, G. and G. Nisticò (1984–87).
- Nisticò, G. (1988)** see Cattaneo, G., C. Dalla Pozza, C. Garola, and G. Nisticò (1988).
- Nisticò, G. (1989)** see Cattaneo, G., C. Garola, and G. Nisticò (1989).
- Nisticò, G. (1989a,90)** see Cattaneo, G. and G. Nisticò (1989,90).

- Nitsch, J., J. Pfarr, and E. -W. Stachow (1981)** (eds.), *Grundlagenprobleme der modernen Physik. Festschrift für Peter Mittelstaedt zum 50. Geburtstag*, Bibliographisches Institut, Mannheim. [1390]
- Nordgren, F. A. (1983)**, The lattice of operator ranges of a von Neumann algebra, *Indiana Univ. Math. J.* **32**, 63–68. [1391]
- Novati, E. (1974)** see Cirelli, R., P. Cotta-Ramusino, and E. Novati (1974).
- Ω -**bibliography87** see Müller, G. H. et al. (1987).
- Ochs, W. (1972)**, On Gudder's hidden variable theorems, *Nuovo Cim.* **10 B**, 172–184. [1392]
- Ochs, W. (1972a)**, On the covering law in quantal proposition systems, *Commun. Math. Phys.* **25**, 245–252. [1393]
- Ochs, W. (1972b)**, On the foundation of quantal proposition system, *Z. Naturforsch.* **27 A**, 893–900. [1394]
- Ochs, W. (1977)**, On the strong law of large numbers in quantum probability theory, *J. Phil. Logic*, **6**, 473–480. [1395]
- Ochs, W. (1979)**, When does a projective system of state operators have a projective limit?, *J. Math. Phys.* **20**, 1842–1847. [1396]
- Ochs, W. (1980)**, Concepts of convergence for a quantum law of large numbers, *Rep. Math. Phys.* **17**, 127–143. [1397]
- Ochs, W. (1980a)**, Gesetze der großen Zahlen zur Auswertung quantenmechanischer Meßreihen, in **Cologne78**, pp. 127–138. [1398]
- Ochs, W. (1981)**, Some comments of the concepts of state in quantum mechanics, *Erkenntnis*, **16**, 339–356. [1399]
- Ochs, W. (1981a)**, The set of all projective limits of a projective system of state operators, *J. Math. Phys.* **22**, 284–289. [1400]
- Ochs, W. (1985)**, Gleason measures and quantum comparative probability, in Accardi, L. and W. von Waldenfels (eds.), *Quantum probability and applications II*, [Proceedings of a workshop held in Heidelberg, West Germany, October 1–5, 1984], Springer-Verlag, Berlin (1985), pp. 388–396. [1401]
- Olubummo, Y. and T. A. Cook (1990)**, Operational logic and the Hahn–Jordan property, *Found. Phys.* **20**, 905–913. [1402]
- Omnès, R. (1987)**, Un calcul de propositions en mécanique quantique, *C. R. Acad. Sci. Paris, Sér. II*, **304**, 1039–1042. [1403]
- Omnès, R. (1987a)**, Interpretation of quantum mechanics, *Phys. Lett.* **125 A**, 169–172. [1404]
- Omnès, R. (1988)**, Logical reformulation of quantum mechanics. I. Foundations, *J. Stat. Phys.* **53**, 893–932. [1405]
- Omnès, R. (1988a)**, Logical reformulation of quantum mechanics. II. Interferences and the Einstein–Podolsky–Rosen experiment, *J. Stat. Phys.* **53**, 933–955. [1406]
- Omnès, R. (1988b)**, Logical reformulation of quantum mechanics. III. Classical limit and reversibility, *J. Stat. Phys.* **53**, 957–975. [1407]
- Omnès, R. (1989)**, Logical reformulation of quantum mechanics. IV. Projectors in semi-classical physics, *J. Stat. Phys.* **57**, 357–382. [1408]

- Omnès, R. (1989a)**, The Einstein–Podolsky–Rosen problem: A new solution, *Phys. Lett.* **138 A**, 157–159. [1409]
- Omnès, R. (1990)**, From Hilbert space to common sense: A synthesis of recent progress in the interpretation of quantum mechanics, *Ann. of Phys.* **201**, 354–447. [1410]
- Omnès, R. (1990a)**, Some progress in measurement theory: The logical interpretation of quantum mechanics, in Zurek, H. (ed.), *Complexity, entropy, and the physics of information*, [The 1988 Workshop on Complexity, Entropy, and the Physics of Information, held in Santa Fe, New Mexico, May–June, 1988], Addison–Wesley, Reading, Mass. (1990), pp. 495–512. [1411]
- Omnès, R. (1990b)**, A consistent interpretation of quantum mechanics, in Cini, M. and J. M. Levy–Leblond (eds.), *Quantum theory without reduction*, [Proceedings of a colloquium held in Rome, Italy, April, 1989], Adam Hilger, Bristol and New York (1990), pp. 27–48. [1412]
- Ontario71** see Hooker, C. A. (1973).
- Ontario73I–III** see Harper, W. L. and Hooker, C. A. (1976).
- Ontario75** see Butts, R. E. and J. Hintikka (1977).
- Ozawa, M. (1983)**, Boolean valued interpretation of Hilbert space theory, *J. Math. Soc. Japan*, **35**, 609–627. [1413]
- Palko, V. (1985)**, On the convergence and absolute continuity of signed states on a logic, *Math. Slovaca*, **35**, 267–275. [1414]
- Palko, V. (1987)** see Dravecký, J., V. Palko, and V. Palková (1987).
- Palko, V. (1989)**, Topologies on quantum logics induced by measures, *Math. Slovaca*, **39**, 175–189. [1415]
- Palková, V. (1987)** see Dravecký, J., V. Palko, and V. Palková (1987).
- Paty, M. (1977)** see Lopes, J. L. and M. Paty (1977).
- Pauli, W. (1964)**, Reviewing study of Hans Reichenbach’s *Philosophical foundations of quantum mechanics*, in Kronig, R. and V. F. Weisskopf (eds.), *Collected scientific papers*, Vol. 2, Interscience, New York. [1416]
- Pavičić, M. (1983)**, The other way round: Quantum logic as metalogic, in Weingartner, P. and J. Czermak (eds.), *Epistemology and philosophy of science*, [Proceedings of the 7th International Wittgenstein symposium, Kirchberg am Wechsel, Austria, August 22–29, 1982], D. Reidel / Hölder–Pichler–Tempisky, Dordrecht–Holland / Wien (1983), pp. 402–407. [1417]
- Pavičić, M. (1987)**, Probabilistic semantics for quantum logic, in **Moscow87**, Vol. 2, pp. 105–107. [1418]
- Pavičić, M. (1987a)**, Minimal quantum logic with merged implications, *Int. J. Theor. Phys.* **26**, 845–952. [1419]
- Pavičić, M. (1989)**, Unified quantum logic, *Found. Phys.* **19**, 999–1016. [1420]
- Pavičić, M. (1990)**, A relative frequency criterion for the repeatability of quantum measurements, *Nuovo Cim.* **105 B**, 1103–1112; Errata, *Ibid.* **106 B**, 105–106. [1421]
- Pavičić, M. (1990a)**, A theory of deduction for quantum mechanics, *Nuova Critica*, I–II, (*Nuova Serie*), *Quaderno 13–14*, 109–129. [1422]
- Pavičić, M. (1990b)**, There is a formal difference between the Copenhagen and the statistical interpretation of quantum mechanics, in **Gdańsk89**, pp. 440–452. [1423]

- Pearle, P. (1984), Comment on “Quantum measurements and stochastic processes,” *Phys. Rev. Lett.* **53**, 1775. [1424]
- Pearson, D. B. (1981) see Gibbins, P. F. and D. B. Pearson (1981).
- Peruzzi, G. (1990), Logical anomalies of quantum objects. A survey, *Found. Phys.* **20**, 337–352. [1425]
- Petersen, A. (1972,72a) see Grgin, E. and A. Petersen (1972,72a).
- Piasecki, K. (1985), Probability of fuzzy events defined as denumerable additivity measure, *Fuzzy Sets and Systems*, **17**, 271–284. [1426]
- Piron, C. (1961), Structure de treillis de certaines observables quantiques, *Helv. Phys. Acta*, **34**, 503–505. [1427]
- Piron, C. (1961a) see Stueckelberg, E. C. G., M. Guenin, C. Piron, and H. Ruegg (1961).
- Piron, C. (1963) see Emch, G. and C. Piron (1963).
- Piron, C. (1963a) see Jauch, J. M. and C. Piron (1963).
- Piron, C. (1964), Axiomatique quantique, *Helv. Phys. Acta*, **37**, 439–468. [1428]
- Piron, C. (1969,70) see Jauch, J. M. and C. Piron (1969,70).
- Piron, C. (1971), Observables in general quantum theory, in **Fermi70**, 274–286. [1429]
- Piron, C. (1971a) see Gudder, S. and C. Piron (1971).
- Piron, C. (1972), Survey of general quantum physics, *Found. Phys.* **2**, 287–314; Reprinted in **Hooker75I**, pp. 513–543. [1430]
- Piron, C. (1976), On the foundations of quantum physics, in **Flato et al (1976)**, pp. 105–116. [1431]
- Piron, C. (1976a), *Foundations of quantum physics*, W. A. Benjamin, Reading. [1432]
- Piron, C. (1977), On the logic of quantum logic, *J. Phil. Logic*, **6**, 481–484. [1433]
- Piron, C. (1977a), A first lecture on quantum mechanics, in **Strasbourg74**, pp. 69–87. [1434]
- Piron, C. (1978), The Lorentz Particles: A new model for the 1/2–spin particle, in **Loyola77**, pp. 49–58. [1435]
- Piron, C. (1979), Galilean and Lorentz particles: A new approach of quantization, in **Fermi77**, pp. 300–307. [1436]
- Piron, C. (1981), Ideal measurement and probability in quantum mechanics, *Erkenntnis*, **16**, 397–401. [1437]
- Piron, C. (1981a), A unified concept of evolution in quantum mechanics, in **Marsburg79**, pp. 109–112. [1438]
- Piron, C. (1982), Paradoxes et mécanique quantique, *Ann. Fond. L. de Broglie*, **7**, 265–274. [1439]
- Piron, C. (1983) see Foulis, D. J., C. Piron, and C. H. Randall (1983).
- Piron, C. (1983a), New quantum mechanics, in **van der Merwe (1983)**, pp. 345–361. [1440]
- Piron, C. (1985), New formalism for new theory, in **Cologne84**, pp. 111–113. [1441]
- Piron, C. (1989), Recent developments in quantum mechanics, *Helv. Phys. Acta*, **62**, 82–90. [1442]
- Piron, C. (1989a), New dialogue on a new science between F. Salviati, G. Sagredo, and Simplicio, *Found. Phys.* **19**, 1017–1025. [1443]

- Pitowsky, I. (1982), Substitution and truth in quantum logic, *Phil. Sci.* **49**, 380–401. [1444]
- Pitowsky, I. (1983), Deterministic model of spin and statistics, *Phys. Rev.* **D 27**, 2316–2326. [1445]
- Pitowsky, I. (1986), The range of quantum probability, *J. Math. Phys.* **27**, 1556–1565. [1446]
- Pitowsky, I. (1989), *Quantum Probability — Quantum logic*, [Lecture Notes in Physics, No. 321], Springer-Verlag, New York. [1447]
- Piziak, R. (1970), Involving rings and projections. I, *J. Natur. Sci. Math.* **10**, 215–227. [1448]
- Piziak, R. (1971), Mackey closure operators, *J. London Math. Soc.* **4**, 33–38. [1449]
- Piziak, R. (1972), Sesquilinear forms in infinite dimensions, *Pacif. J. Math.* **43**, 475–481. [1450]
- Piziak, R. (1973), Orthomodular posets from sesquilinear forms, *J. Austral. Math. Soc.* **15**, 265–269. [1451]
- Piziak, R. (1974), Orthomodular lattices as implication algebras, *J. Phil. Logic*, **3**, 413–438. [1452]
- Piziak, R. (1974a), Symplectic orthogonality spaces, *J. Comb. Theory*, (**A**) **16**, 87–96. [1453]
- Piziak, R. (1974b) see Herman, L. and R. Piziak (1974).
- Piziak, R. (1975) see Herman, L., E. L. Marsden, and R. Piziak (1975).
- Piziak, R. (1978), Orthomodular lattices and quantum physics, *Math. Magazine*, **51**, 299–303. [1454]
- Piziak, R. (1990), Lattice theory, quadratic spaces, and quantum proposition systems, *Found. Phys.* **20**, 651–665. [1455]
- Plymen, R. J. (1968), A modification of Piron’s axioms, *Helv. Phys. Acta*, **41**, 69–74. [1456]
- Plymen, R. J. (1968), C^* -algebras and Mackey’s axioms, *Commun. Math. Phys.* **8**, 132–146. [1457]
- Poguntke, W. (1975) see Davey, B. A., W. Poguntke, and I. Rival (1975).
- Poguntke, W. (1980), Finitely generated ortholattices: the commutator and some applications, in **Bolyai33**, pp. 651–655. [1458]
- Poguntke, W. (1981), On finitely generated simple complemented lattices, *Canad. Math. Bull.* **24**, 69–72. [1459]
- Pool, J. C. T. (1968), Baer $*$ -semigroups and the logic of quantum mechanics, *Commun. Math. Phys.* **9**, 118–141; Reprinted in **Hooker75I**, pp. 365–394. [1460]
- Pool, J. C. T. (1968a), Semimodularity and the logic of quantum mechanics, *Commun. Math. Phys.* **9**, 212–228; Reprinted in **Hooker75I**, pp. 395–414. [1461]
- Popper, K. R. (1968), Birkhoff and von Neumann’s interpretation of quantum mechanics, *Nature*, **219**, 682–695. [1462]
- Popper, K. R. (1969), Quantum theory, quantum logic, and the calculus of probability, in *Akten des XIV internationalen Kongresses für Philosophy*, Vol. 3, Herder, Wien (1969). [1463]

- Posiewnik, A. (1985)**, On some definition of physical state, *Int. J. Theor. Phys.* **24**, 135–140. [1464]
- Posiewnik, A. (1985a)**, Category theoretical construction of the figure of states, *Int. J. Theor. Phys.* **24**, 193–200. [1465]
- Posiewnik, A. (1986)**, Dynamical transformations and information systems, *Int. J. Theor. Phys.* **25**, 891–896. [1466]
- Posiewnik, A. (1987)**, Hilbert space representation of time evolution of pure states, *Int. J. Theor. Phys.* **26**, 429–434. [1467]
- Posiewnik, A. (1987a)**, Physical experiment and computation, *Int. J. Theor. Phys.* **26**, 239–245. [1468]
- Posiewnik, A. (1988)**, Computability of physical operations, *Int. J. Theor. Phys.* **27**, 83–88. [1469]
- Posiewnik, A. and J. Pykacz (1986)**, Constructive description of the compact set of states, *Int. J. Theor. Phys.* **25**, 239–246. [1470]
- Post, E. J. (1974)**, Comments on ‘The formal representation of physical quantities,’ in Cohen, R. S. and M. W. Wartofsky (1974), pp. 210–213. [1471]
- Prieur, A. (1987)** see Mittelstaedt, P., A. Prieur, and R. Schieder (1987).
- Primas, H. (1977)**, Theory reduction and non-Boolean theories, *J. Math. Biol.* **4**, 281–301. [1472]
- Prugovečki, E. (1966)**, An axiomatic approach to the formalism of quantum mechanics. I, *J. Math. Phys.* **7**, 1054–1069. [1473]
- Prugovečki, E. (1966a)**, An axiomatic approach to the formalism of quantum mechanics. II, *J. Math. Phys.* **7**, 1070–1096. [1474]
- Prugovečki, E. (1966b)**, A formalism for generalized quantum mechanics, *J. Math. Phys.* **7**, 1680–1696. [1475]
- Prugovečki, E. (1967)**, On a theory of measurement of incompatible observables in quantum mechanics, *Canad. J. Phys.* **45**, 2173–2219. [1476]
- Przelecki, M., K. Szaniawski, and R. Wójcicki (1977)** (eds.), *Formal methods in the methodology of empirical sciences*, [Proceedings of a conference held in Warsaw, Poland, June 17–21, 1974], D. Reidel / Osolineum, Dordrecht–Holland / Wrocław. [1477]
- PSA74** see Cohen, R. S. et al. (1976).
- PSA76** see Suppe, F. and P. D. Asquith (1977).
- PSA78** see Asquith, P. D. and I. Hacking (1978).
- PSA80** see Asquith, P. D. and R. N. Giere (1980).
- Pták, P. (1981,81a)**, see Maňasová, V. and P. Pták (1981,81a).
- Pták, P. (1981b)**, Realcompactness and the notion of observable, *J. London Math. Soc.* **23**, 534–536. [1478]
- Pták, P. (1982)**, see Brabec, J. and P. Pták (1982).
- Pták, P. (1982a)**, Konkrétní logika kvantnového systému, *Acta Polytechnica Práce ČVUT Praha, Ser. III, No. 4*, 65–67. [1479]
- Pták, P. (1983)**, Logics with given centers and state spaces, *Proc. Am. Math. Soc.* **88**, 106–109. [1480]

- Pták, P. (1983a), Weak dispersion-free states and the hidden variables hypothesis, *J. Math. Phys.* **24**, 839–840. [1481]
- Pták, P. (1983b,83c) see Navara, M. and P. Pták (1983,83a).
- Pták, P. (1984), On centers and state spaces of logics, *Suppl. Rend. Circ. Mat. Palermo, Serie II*, **3**, 225–229. [1482]
- Pták, P. (1984a), Spaces of observables, *Czechoslovak Math. J.* **34**, 552–561. [1483]
- Pták, P. (1985), Extension of states on logics, *Bull. Polish Acad. Sci. Math.* **33**, 493–497. [1484]
- Pták, P. (1985a) see Bunce, L. J., M. Navara, P. Pták, and J. D. M. Wright (1985).
- Pták, P. (1985b), Categories of orthomodular posets, *Math. Slovaca*, **35**, 59–65. [1485]
- Pták, P. (1986), A note on Jauch–Piron states, *Rep. Math. Phys.* **23**, 155–159. [1486]
- Pták, P. (1986a), Summing of Boolean algebras and logics, *Demonstratio Math.* **19**, 349–357. [1487]
- Pták, P. (1987), “Hidden variables” on concrete logics (extensions), *Comment. Math. Univ. Carolin.* **28**, 157–163. [1488]
- Pták, P. (1987a), Exotic logics, *Colloq. Math.* **54**, 1–7. [1489]
- Pták, P. (1987b) see Hamhalter, J. and P. Pták (1987),
- Pták, P. (1987c), An observation on observables, *Acta Polytechnica Práce ČVUT Praha, Ser. IV, No. 10*, 81–86. [1490]
- Pták, P. (1988) see Navara, M., P. Pták, and V. Rogalewicz (1988).
- Pták, P. (1988a), $FAT \longleftrightarrow CAT$ (in the state space of quantum logics), in **Ján88**, 113–118. [1491]
- Pták, P. (1988b,88c,89) see Navara, M. and Pták, P. (1988,88a,89).
- Pták, P. (1990), see Binder, J. and P. Pták (1990).
- Pták, P. and S. Pulmannová (1989), *Kvantové logiky*, Veda, Vydavateľstvo Slovenskej Akadémie Vied, Bratislava. [1492]
- Pták, P. and S. Pulmannová (1991), *Orthomodular structures as quantum logics*, Kluwer/Veda, Dordrecht–Holland/Bratislava. [1493]
- Pták, P. and V. Rogalewicz (1983), Regularly full logics and the unique problem for observables, *Ann. Inst. Henri Poincaré*, **38 A**, 69–74. [1494]
- Pták, P. and V. Rogalewicz (1983a), Measures on orthomodular partially ordered sets, *J. Pure Appl. Algebra*, **28**, 75–80. [1495]
- Pták, P. and J. Tkadlec (1988), A note on determinacy of measures, *Čas. Pěst. Mat.* **113**, 435–436. [1496]
- Pták, P. and J. D. M. Wright (1985), On the concreteness of quantum logics, *Aplikace Matematiky*, **30**, 274–285. [1497]
- Pulmannová, S. (1975), Note on the structure of quantal proposition systems, *Acta Phys. Slovaca* **25**, 234–240. [1498]
- Pulmannová, S. (1976), A superposition principle in quantum logics, *Commun. Math. Phys.* **49**, 47–51. [1499]
- Pulmannová, S. (1977), Symmetries in quantum logics, *Int. J. Theor. Phys.* **16**, 681–688. [1500]
- Pulmannová, S. (1978), A remark on the comparison of Mackey and Segal models, *Math. Slovaca*, **28**, 297–304. [1501]

- Pulmannová, S. (1978a)**, Joint distributions of observables on quantum logics, *Int. J. Theor. Phys.* **17**, 665–675. [1502]
- Pulmannová, S. (1979)**, Superposition principle and sectors in quantum logics, *Int. J. Theor. Phys.* **18**, 915–922. [1503]
- Pulmannová, S. (1980)**, Relative compatibility and joint distribution of observables, *Found. Phys.* **10**, 641–653. [1504]
- Pulmannová, S. (1980a)** see Dvurečenskij, A. and S. Pulmannová (1980).
- Pulmannová, S. (1980b)**, Semiobservables on quantum logic, *Math. Slovaca*, **30**, 419–432. [1505]
- Pulmannová, S. (1980c)**, Superposition of states and a representation theorem, *Ann. Inst. Henri Poincaré*, **A 32**, 351–360. [1506]
- Pulmannová, S. (1981)**, On the observables on quantum logic, *Found. Phys.* **11**, 127–136. [1507]
- Pulmannová, S. (1981a)**, Compatibility and partial compatibility in quantum logics, *Ann. Inst. Henri Poincaré* **34 A**, 391–403. [1508]
- Pulmannová, S. (1981b)**, A note on the extensibility of states, *Math. Slovaca*, **31**, 177–181. [1509]
- Pulmannová, S. (1981c,82)** see Dvurečenskij, A. and S. Pulmannová (1981,82).
- Pulmannová, S. (1982a)**, Individual ergodic theorem on a logic, *Math. Slovaca*, **32**, 413–416. [1510]
- Pulmannová, S. (1983)** see Neubrunn, T. and S. Pulmannová (1983).
- Pulmannová, S. (1983a)**, On representations of logics, *Math. Slovaca*, **33**, 357–362. [1511]
- Pulmannová, S. (1983b)**, Coupling of quantum logics, *Int. J. Theor. Phys.* **22**, 837–850. [1512]
- Pulmannová, S. (1984)** see Dvurečenskij, A. and S. Pulmannová (1984)
- Pulmannová, S. (1984b)**, On the products of quantum logics, *Rend. Circ. Mat. Palermo, Serie II*, **3**, 231–235. [1513]
- Pulmannová, S. (1984c)**, On a characterization of linear subspaces of observables, *Demonstratio Math.* **17**, 1073–1078. [1514]
- Pulmannová, S. (1985)**, Tensor product of quantum logics, *J. Math. Phys.* **26**, 1–5. [1515]
- Pulmannová, S. (1985a)**, Commutators in orthomodular lattices, *Demonstratio Math.* **18**, 187–208. [1516]
- Pulmannová, S. (1985b)** see Lutterová, T. and S. Pulmannová (1985).
- Pulmannová, S. (1985c)** see Nánásiová, O. and S. Pulmannová (1985).
- Pulmannová, S. (1986)**, Transition probability spaces, *J. Math. Phys.* **27**, 1791–1795. [1517]
- Pulmannová, S. (1986a)**, Functional properties of transition probability spaces, *Rep. Math. Phys.* **24**, 81–86. [1518]
- Pulmannová, S. (1987)** see Gudder, S. and S. Pulmannová (1987).
- Pulmannová, S. (1988,88a)** see Dvurečenskij, A. and S. Pulmannová (1988,88a).
- Pulmannová, S. (1988b)**, Uncertainty relations and state spaces, *Ann. Inst. Henri Poincaré*, **48 A**, 325–332. [1519]

- Pulmannová, S. (1988c)**, Joint distribution of observables on spectral logics, *Rep. Math. Phys.* **26**, 67–71. [1520]
- Pulmannová, S. (1988d)**, Some properties of transition amplitude spaces, in **Ján88**, pp. 119–123. [1521]
- Pulmannová, S. (1988e)**, Free product of ortholattices, *Acta Sci. Math. Szeged.* **52**, 47–52. [1522]
- Pulmannová, S. (1989)**, Mielnik and Cantoni transition probabilities, *Int. J. Theor. Phys.* **28**, 711–718. [1523]
- Pulmannová, S. (1989a,89b)** see Dvurečenskij, A. and S. Pulmannová (1989–89a).
- Pulmannová, S. (1989c)**, Representations of quantum logics and transition probability spaces, in Bitsakis, E. I. and C. A. Nicolaides (eds.), *The concept of probability*, Kluwer Academic Publishers, Dordrecht–Holland (1989), pp. 51–59. [1524]
- Pulmannová, S. (1990)**, Transition amplitude spaces and quantum logics with vector-valued states, *Found. Phys.* **29**, 455–460. [1525]
- Pulmannová, S. (1990a)**, Sum logics and Hilbert spacs, in **Ján90**, pp. 169–174. [1526]
- Pulmannová, S. (1990b)** see Dvurečenskij, A. and S. Pulmannová (1990a).
- Pulmannová, S. (1990c,d)** see Dvurečenskij, A., T. Neubrunn, and S. Pulmannová (1990,a).
- Pulmannová, S. (1990e,91)** see Pták, P. and S. Pulmannová (1990,91).
- Pulmannová, S. and A. Dvurečenskij (1980)**, Stochastic processes on quantum logics, *Rep. Math. Phys.* **18**, 303–315. [1527]
- Pulmannová, S. and A. Dvurečenskij (1985)**, Uncertainty principle and joint distribution of observables, *Ann. Inst. Henri Poincaré*, **42 A**, 253–265. [1528]
- Pulmannová, S. and A. Dvurečenskij (1989)**, Sum logics and sums of unbounded observables, *Rep. Math. Phys.* **28**, 361–371. [1529]
- Pulmannová, S. and A. Dvurečenskij (1990)**, Quantum logics, vector-valued measures, and representations, *Ann. Inst. Henri Poincaré*, **53 A**, 83–95. [1530]
- Pulmannová, S. and S. Gudder (1987)**, Geometric properties of transition amplitude spaces, *J. Math. Phys.* **28**, 2393–2399. [1531]
- Pulmannová, S. and Z. Riečanová (1989)**, A topology of quantum logics, *Proc. Am. Math. Soc.* **106**, 891–897. [1532]
- Pulmannová, S. and Z. Riečanová (1990)**, A remark to orthomodular lattices with almost orthogonal set of atoms, in **Ján90**, pp. 175–176. [1533]
- Pulmannová, S. and Z. Riečanová (1991)**, Logics with separating sets of measures, *Math. Slovaca*, **41**, 167–178. [1534]
- Pulmannová, S. and B. Stehlíková (1986)**, Strong law of large numbers and central limit theorem on a Hilbert space logic, *Rep. Math. Phys.* **23**, 99–107. [1535]
- Putnam, H. (1957)**, Three-valued logic, *Philosophical Studies*, **8**, 73–80; Reprinted in **Hooker75I**, pp. 99–107. [1536]
- Putnam, H. (1969)**, Is logic empirical?, in **Boston66/68**, pp. 216–241; Reprinted in **Hooker79II**, pp. 181–206; Also reprinted in Putnam, H., *Philosophical papers*, Vol. I, Cambridge University Press, Cambridge (1975), pp. 174–197. [1537]

- Putnam, H. (1974)**, How to think quantum-logically, *Synthese*, **29**, 55–61; Reprinted in *Suppes*76, pp. 47–53. [1538]
- Putnam, H. (1978)** see Friedman, M. and H. Putnam (1978).
- Pyatnitsyn, V. N. and V. S. Meskov (1972)**, On the status of logic in quantum mechanics, *Theorie a Metoda*, **4**, 111–129. [1539]
- Pykacz, J. (1983)**, Affine Mączyński logics on compact convex sets of states, *Int. J. Theor. Phys.* **22**, 97–106. [1540]
- Pykacz, J. (1986)** see Posiewnik, A. and J. Pykacz (1986).
- Pykacz, J. (1987)**, Quantum logics as families of fuzzy subsets of the set of physical states, in *Proceedings of the Second International Fuzzy Systems Association Congress, Tokyo, July 20–25, 1987*, Vol. 2, Tokyo (1987), pp. 437–440. [1541]
- Pykacz, J. (1987a)**, Quantum logics and soft fuzzy probability spaces, *Bull. Sous-Ensembl. Flous Appl.* **32**, 150–157. [1542]
- Pykacz, J. (1988)**, Probability measures in the fuzzy set approach to quantum logics, in *Ján*88, pp. 124–128; Reprinted in *Bull. Sous-Ensembl. Flous Appl.* **37**, 81–85. [1543]
- Pykacz, J. (1988a)**, On the geometrical origin of Bell’s inequalities, in *Gdańsk*87, pp. 706–712. [1544]
- Pykacz, J. (1989)**, On Bell-type inequalities in quantum logics, in Bitsakis, E. I. and C. A. Nicolaidis (eds.), *The concept of probability*, Kluwer Academic Publishers, Dordrecht–Holland (1989), pp. 115–120. [1545]
- Pykacz, J. (1989a)**, Fuzzy set description of physical systems and their dynamics, *Bull. Sous-Ensembl. Flous Appl.* **38**, 102–107. [1546]
- Pykacz, J. (1990)**, Logical analysis of relations between quantum, classical, and hidden-variable theories, in *Gdańsk*89, pp. 453–460. [1547]
- Pykacz, J. (1990a)**, Fuzzy quantum logics and the problem of connectives, *Bull. Sous-Ensembl. Flous Appl.* **43**, 49–53. [1548]
- Pykacz, J. and E. Santos (1990)**, Constructive approach to logics of physical systems: Applications to EPR case, *Int. J. Theor. Phys.* **29**, 1041–1058. [1549]
- Pykacz, J. and E. Santos (1991)**, Hidden variables in quantum logic approach re-examined, *J. Math. Phys.* **32**, 1287–1292. [1550]
- Quadt, R. (1989)**, The nonobjectivity of past events in quantum mechanics, *Found. Phys.* **19**, 1027–1035. [1551]
- Quay, P. M. (1974)**, Progress as a demarcation criterion for the sciences, *Phil. Sci.* **41**, 154–170. [1552]
- Rabinovich, V. L. (1987)** (ed.), *Abstracts of the 8th International Congress on Logic, Methodology, and Philosophy of Science*, [Moscow, August, 1987], Academy of sciences of the USSR, Moscow. [1553]
- Raczyński, A. (1986)**, Review of *Symposium on the foundations of modern physics* 85 edited by P. Lahti and P. Mittelstaedt, *Rep. Math. Phys.* **24**, 261–262. [1554]
- Ramsay, A. (1965)**, Dimension theory in complete orthocomplemented weakly modular lattices, *Trans. Am. Math. Soc.* **116**, 9–13. [1555]
- Ramsay, A. (1966)**, A theorem on two commuting observables, *J. Math. Mech.* **15**, 227–234. [1556]

- Randall, C. H. (1969), A complete and countable orthomodular lattice is atomic, *Proc. Am. Math. Soc.* **21**, 253. [1557]
- Randall, C.H.(1971,a,2,4-b,8,9,81,a,3-5) see Foulis,D.J. and C.H.Randall (1971-85).
- Randall, C. H. (1980) see Frazer, P. J., D. J. Foulis, and C. H. Randall (1980).
- Randall, C. H. (1983) see Foulis, D. J., C. Piron, and C. H. Randall (1983).
- Randall, C. H. (1987) see Kläy, M. P., Foulis, D. J. and C. H. Randall (1987).
- Randall, C. H. and D. J. Foulis (1970), An approach to empirical logic, *Am. Math. Monthly*, **77**, 364–374. [1558]
- Randall, C. H. and D. J. Foulis (1972), States and the free orthogonality monoid, *Math. Systems Theory*, **6**, 268–276. [1559]
- Randall, C. H. and D. J. Foulis (1973), Operational statistics. II. Manuals of operations and their logics, *J. Math. Phys.* **14**, 1472–1480. [1560]
- Randall, C. H. and D. J. Foulis (1976), A mathematical setting for inductive reasoning, in **Ontario73III**, pp. 169–205. [1561]
- Randall, C. H. and D. J. Foulis (1979), The operational approach to quantum mechanics, in **Hooker79**, pp. 167–201. [1562]
- Randall, C. H. and D. J. Foulis (1979a), Tensor products of quantum logics do not exist, *Notices Am. Math. Soc.* **26**, A–557. [1563]
- Randall, C. H. and D. J. Foulis (1981), Operational statistics and tensor products, in **Marburg79**, pp. 21–28. [1564]
- Randall, C. H. and D. J. Foulis (1983), Properties and operational propositions in quantum mechanics, *Found. Phys.* **13**, 843–857. [1565]
- Randall, C. H. and D. J. Foulis (1985), Stochastic entities, in **Cologne84**, pp. 265–284. [1566]
- Randall, C. H., M. F. Janowitz, and D. J. Foulis (1973), Orthomodular generalizations of homogeneous Boolean algebras, *J. Austral. Math. Soc.* **15**, 94–104. [1567]
- Rédei, M. (1986), Nonexistence of hidden variables in the algebraic approach, *Found. Phys.* **16**, 807–815. [1568]
- Rédei, M. (1986a), Quantum conditional probabilities are not probabilities of quantum conditional, *Phys. Lett. A* **139**, 287–290. [1569]
- Rédei, M. (1987), On the problem of local hidden variables in algebraic quantum mechanics, *J. Math. Phys.* **28**, 833–835. [1570]
- Rédei, M. (1989), The hidden variable problem in algebraic relativistic quantum field theory, *J. Math. Phys.* **30**, 461–463. [1571]
- Rehder, W. (1979), Spectral properties of products of projections in quantum probability theory, *Int. J. Theor. Phys.* **18**, 791–805. [1572]
- Rehder, W. (1980), Quantum logic of sequential events and their objectivistic probabilities, *Int. J. Theor. Phys.* **19**, 221–237. [1573]
- Rehder, W. (1980a), Quantum probability zero–one law for sequential terminal events, *Int. J. Theor. Phys.* **19**, 523–536. [1574]
- Rehder, W. (1980b), When do projections commute?, *Z. Naturforsch.* **35**, 437–441. [1575]

- Rehder, W. (1981)**, Modal foundations of probability theory, *Erkenntnis*, **16**, 61–71. [1576]
- Rehder, W. (1982)**, Conditions for probabilities of conditionals to be conditional probabilities, *Synthese*, **53**, 439–443. [1577]
- Rehder, W. (1983)**, Glimpses of the disastrous invasion of philosophy by logic, *Logique et Analyse*, **26**, (102), 225–239. [1578]
- Reichenbach, H. (1944)**, *Philosophical foundation of quantum mechanics*, University of California Press, Los Angeles. [1579]
- Reichenbach, H. (1946)**, Reply to Ernest Nagel’s criticism of my views on quantum mechanics, *J. Phil.* **43**, 239–247. [1580]
- Reichenbach, H. (1948)**, The principle of anomaly in quantum mechanics, *Dialectica*, **2**, 337–350. [1581]
- Reichenbach, H. (1952)**, Les fondements logiques de la théorie des quanta: Utilisation d’une logique à trois valeurs, in *Applications scientifique de la logique mathématique*, Acte du 2^e Colloque International de Logique Mathématique, Paris. [1582]
- Reichenbach, H. (1975)**, Three-valued logic and the interpretation of quantum mechanics, in **Hooker75I**, pp. 53–97. [1583]
- Richter, E. (1964)**, Bemerkungen zur “Quantenlogik,” *Phil. Naturalis*, **8**, 225–231. [1584]
- Riečan, B. (1979)**, The measure extension theorem for subadditive probability measures in orthomodular σ -continuous lattices, *Comment. Math. Univ. Carolin.* **20**, 309–316. [1585]
- Riečan, B. (1980,88,89)** see Dvurečenskij, A. and B. Riečan (1980–89).
- Riečan, B. (1988a)** see Kôpka, F. and B. Riečan (1988).
- Riečan, B. (1988b)**, A new approach to some notions of statistical quantum mechanics, *Bull. Sous-Ensembl. Flous Appl.* **36**, 4–6. [1586]
- Riečan, B. (1989)**, Indefinite integral in fuzzy quantum spaces, *Bull. Sous-Ensembl. Flous Appl.* **38**, 5–7. [1587]
- Riečan, B. (1990)**, On mean value in F -quantum spaces, *Aplikace Matematiky*, **35**, 209–214. [1588]
- Riečanová, Z. (1988)**, Some properties of topology in quantum logics induced by measures, in **Ján88**, pp. 129–132. [1589]
- Riečanová, Z. (1989)**, Topology in a quantum logic induced by a measure, in *Proceedings of the conference: Topology and Measure, V*, held in Binz, 1987, Wissensch. Beitr., Ernst-Moritz-Arndt Univ., Greifswald (1988), pp. 126–130. [1590]
- Riečanová, Z. (1989a)**, Topologies in atomic quantum logics, *Acta Univ. Carolin. — Math. Phys.* **30**, No. 2, 143–148. [1591]
- Riečanová, Z. (1989b,90,91)** see Pulmannová, S. and Z. Riečanová (1989–91).
- Riečanová, Z. (1990a)** see Janiš, V. and Z. Riečanová (1990).
- Rival, I. (1975)** see Davey, B. A., W. Poguntke, and I. Rival (1975).
- Roberts, J. E. and G. Roepstorff (1969)**, Some basic concepts of algebraic quantum theory, *Commun. Math. Phys.* **11**, 321–338. [1592]

- Roddy, M. (1984), An orthomodular analogue of the Birkhoff–Menger theorem, *Algebra Universalis*, **19**, 55–60. [1593]
- Roddy, M. (1987) see Mayet, R. and M. Roddy (1987).
- Roddy, M. (1990), A modular ortholattice without the relative center property, in *Ján90*, pp. 188–190. [1594]
- Rodriguez, E. (1984,85,86) see Finkelstein, D. and E. Rodriguez (1984–86).
- Rodriguez, E. (1986a) see Anger, F. D., J. Sarmiento, and R. V. Rodriguez (1986).
- Roepstorff, G. (1969) see Roberts, J. E. and G. Roepstorff (1969).
- Rogalewicz, V. (1983,83a) see Pták, P. and V. Rogalewicz (1983,83a).
- Rogalewicz, V. (1984), Remarks about measures on orthomodular posets, *Čas. Pěst. Mat.* **109**, 93–99. [1595]
- Rogalewicz, V. (1984a), A note on the uniqueness problem for observables, *Acta Polytechnica Práce ČVUT Praha*, **6**, Serie IV, No. 1, 107–111. [1596]
- Rogalewicz, V. (1984b), On the uniqueness problem for observables for quite full logics, *Ann. Inst. Henri Poincaré*, **41 A**, 445–451. [1597]
- Rogalewicz, V. (1988,88a) see Navara, M. and V. Rogalewicz (1988,88a).
- Rogalewicz, V. (1988b) see Navara, M., P. Pták, and V. Rogalewicz (1988).
- Rogalewicz, V. (1988c), Any orthomodular poset is a pasting of Boolean algebras, *Comment. Math. Univ. Carolin.* **29**, 557–558. [1598]
- Rogalewicz, V. (1989), A remark on λ -regular orthomodular lattices, *Aplikace Matematiky*, **34**, 449–452. [1599]
- Rogalewicz, V. (1991) see Navara, M. and V. Rogalewicz (1991).
- Rogalewicz, V. (1991a), Jauch–Piron logics with finiteness conditions, *Int. J. Theor. Phys.* **30**, 437–445. [1600]
- Rogalewicz, V. (1991b), On generating and concreteness in quantum logics, *Math. Slovaca*, **41**, 431–435. [1601]
- Rogalewicz, V. and M. Navara (1988), On constructions of orthomodular posets, in *Ján88*, pp. 133–137. [1602]
- Román, L. and B. Rumbos (1988), Remarks on material implication in orthomodular lattice, *C. R. Math. Rep. Acad. Sci. Canada*, **10**, 279–284. [1603]
- Romberger, S. (1971) see Nakano, H. and S. Romberger (1971).
- Rose, G. (1964), Zur Orthomodularität von Wahrscheinlichkeitsfeldern, *Z. Phys.* **181**, 331–332. [1604]
- Ruegg, H. (1961) see Stueckelberg, E. C. G., M. Guenin (1961), C. Piron, and H. Ruegg (1961).
- Rumbos, B. (1988) see Román, L. and B. Rumbos (1988).
- Rüttimann, G. T. (1970), On the logical structure of quantum mechanics, *Found. Phys.* **1**, 173–182; Reprinted in *Hooker79II*, pp. 109–119. [1605]
- Rüttimann, G. T. (1974), Closure operators and projections on involution posets, *J. Austral. Math. Soc.* **18**, 453–457. [1606]
- Rüttimann, G. T. (1974a), Projections on orthomodular lattices, in *Marburg73*, pp. 334–341. [1607]
- Rüttimann, G. T. (1975), Decompositions of projections on orthomodular lattices, *Canad. Math. Bull.* **18**, 263–267. [1608]

- Rüttimann, G. T. (1975a), The Hahn–Jordan decomposition theorem in finite quantum logics, *Notices Am. Math. Soc.* **22**, A–183. [1609]
- Rüttimann, G. T. (1976), Stable faces of a polytope, *Bull. Am. Math. Soc.* **82**, 314–316. [1610]
- Rüttimann, G. T. (1977), Jauch–Piron states, *J. Math. Phys.* **18**, 189–193. [1611]
- Rüttimann, G. T. (1977a), Jordan–Hahn decomposition of signed weights on finite orthogonality, *Comment. Math. Helvetici*, **52**, 129–144. [1612]
- Rüttimann, G. T. (1977b), *Logikkalküle der Quantenphysik. Eine Abhandlung zur Ermittlung der formal-logischen Systeme, die der nicht-relativistischen Quantentheorie zugrundeliegen*, Duncker & Humblot, Berlin. [1613]
- Rüttimann, G. T. (1978,78a) see Fischer, H. R. and G. T. Rüttimann (1978,78a)
- Rüttimann, G. T. (1979), On the logical structure of quantum mechanics, in *Hooker79II*, pp. 109–119. [1614]
- Rüttimann, G. T. (1981), Detectable properties and spectral quantum logics, in *Marburg79*, pp. 35–47. [1615]
- Rüttimann, G. T. (1982) see Gudder, S. P., G. T. Rüttimann, and R. J. Greechie (1982).
- Rüttimann, G. T. (1985), Quantum logic and convex structures, in *Cologne84*, pp. 319–328. [1616]
- Rüttimann, G. T. (1985a) see Cook, T. A. and G. T. Rüttimann (1985).
- Rüttimann, G. T. (1985b,85c) see Edwards, C. M. and G. T. Rüttimann (1985,85a).
- Rüttimann, G. T. (1985d), Expectation functionals of observables and counters, *Rep. Math. Phys.* **21**, 213–222. [1617]
- Rüttimann, G. T. (1985e) see Cohen, D. W. and G. T. Rüttimann (1985).
- Rüttimann, G. T. (1986) see Gudder, S. P., M. P. Kläy, and G. T. Rüttimann (1986).
- Rüttimann, G. T. (1986a,88,88a) see Gudder, S. P. and G. T. Rüttimann (1986–88a).
- Rüttimann, G. T. (1988b), The Jordan–Hahn property, in *Ján88*, pp. 138–145. [1618]
- Rüttimann, G. T. (1988c,89) see Edwards, C. M. and G. T. Rüttimann (1988,89).
- Rüttimann, G. T. (1989a), Weak density of states, *Found. Phys.* **19**, 1101–1112. [1619]
- Rüttimann, G. T. (1989b), Probability in quantum mechanics, in Bitsakis, E. I. and C. A. Nicolaidis (eds.), *The concept of probability*, Kluwer Academic Publishers, Dordrecht–Holland (1989), pp. 61–68. [1620]
- Rüttimann, G. T. (1989c), Book review: *Quantum probability* by Stanly P. Gudder, *Found. Phys.* **19**, 1279–1281. [1621]
- Rüttimann, G. T. (1989d), The approximate Jordan–Hahn decomposition, *Canad. J. Math.* **41**, 1124–1146. [1622]
- Rüttimann, G. M. (1990) see Edwards, C. M. and G. T. Rüttimann (1990).
- Rüttimann, G. M. (1990a), On inner ideals in ternary algebras, *Math. Z.* **204**, 309–318. [1623]
- Rüttimann, G. M. (1991) see Navara, M. and G. T. Rüttimann (1990).
- Rüttimann, G. T. and C. Schindler (1986), The Lebesgue decomposition of measures on orthomodular posets, *Quart. J. Math. Oxford*, **37**, 321–345. [1624]
- Rüttimann, G. T. and C. Schindler (1987), On σ -convex sets of probability measures, *Bull. Polish Acad. Sci. Math.* **33**, 583–595. [1625]

- Saarimäki, M. (1982), Counterexamples to the algebraic closed graph theorem, *J. London Math. Soc.* **26**, 421–424. [1626]
- Salzburg83 see Weingartner, P. (1983).
- Santos (1990,90a) see Pykacz, J. and E. Santos (1990,90a).
- Sasaki, U. (1952), Lattice theoretical characterization of geometries satisfying “Axiome der Verknüpfung,” *J. Sci. Hiroshima Univ.* **A 16**, 417–423. [1627]
- Sasaki, U. (1954), Orthocomplemented lattices satisfying the exchange axiom, *J. Sci. Hiroshima Univ.* **A 17**, 293–302. [1628]
- Savelev, L. Ja. (1982), Measures on ortholattices, *Soviet. Math. Dokl.* **25**, 837–840 (1982). Translation of *Doklady Akad. Nauk SSSR*, **264**, No. 5. [1629]
- Schaefer, H. H. (1974), Ordering of vector spaces, in **Marburg73**, pp. 4–10. [1630]
- Scheibe, E. (1958) see von Weizsäcker, C. F., E. Scheibe, and G. Süßmann (1958).
- Scheibe, E. (1960), Über hermitesche Formen in topologischen Vektorräumen. I, *Ann. Akad. Sci. Fennicae Ser. A. I. Math.* **294**, 1–30. [1631]
- Scheibe, E. (1973), *The logical analysis of quantum mechanics*, Pergamon Press, New York. [1632]
- Scheibe, E. (1974), Popper and quantum logic, *Brit. J. Phil. Sci.* **25**, 319–342. [1633]
- Scheibe, E. (1985), Quantum logic and some aspects of logic in general, in **Cologne84**, pp. 115–128. [1634]
- Schelp, R. H. (1970) see Gudder, S. P. and R. H. Schelp (1970).
- Scheuerer, P. B. (1972), Logique fermionique et logique bosonique, *Int. Logic Rev.* **3**, 188–206. [1635]
- Schieder, R. (1987) see Mittelstaedt, P., A. Prieur, and R. Schieder (1987).
- Schiminovich, S. (1962,62a,63) see Finkelstein, D., J. M. Jauch, S. Schiminovich, and D. Speiser (1962,62a,63).
- Schindler, C. (1986,87) see Rüttimann, G. T. and C. Schindler (1986,87).
- Schindler, C. (1988), The Lebesgue decomposition of measures on finite orthomodular posets, in **Ján88**, pp. 146–151. [1636]
- Schindler, C. (1989), Physical and geometrical characterization of the Jordan–Hahn and the Lebesgue decomposition, *Found. Phys.* **19**, 1299–1314. [1637]
- Schindler, C. (1990), The unique Jordan–Hahn decomposition property, *Found. Phys.* **20**, 561–573. [1638]
- Schindler, C. (1990a), Constructible hypergraphs, *Discrete Math.* (to appear). [1639]
- Schindler, C. (1990b) see Gudder, S. P. and C. Schindler (1990).
- Schindler, C. (1991), Quantum logics with the existence property, *Found. Phys.* **21**, 483–498. [1640]
- Schlessinger, M. (1965) see Zierler, N. and M. Schlessinger (1965).
- Schmidt, E. T. (1965), Remark on a paper of M. F. Janowitz, *Acta Math. Hung.* **16**, 435. [1641]
- Schmidt, H.-J. (1983) see Hartkämper, A. and H.-J. Schmidt (1983).
- Schrag, G. (1976), Every finite group is the automorphism group of some finite orthomodular lattice, *Proc. Am. Math. Soc.* **55**, 243–249. [1642]
- Schrag, G. (1988), Automorphism groups and full state spaces of the Peterson graph generalizations of G_{32} , *Discrete Math.* **70**, 185–198. [1643]

- Schreiner, E. A. (1966)**, Modular pairs in orthomodular lattices, *Pacif. J. Math.* **19**, 519–528. [1644]
- Schreiner, E. A. (1969)**, A note on O–symmetric lattices, *Caribbean J. Sci. Math.* **1**, 40–50. [1645]
- Schroek Jr., F. E. and D. J. Foulis (1990)**, Stochastic quantum mechanics viewed from the language of manuals, *Found. Phys.* **20**, 823–858. [1646]
- Schröter, J. (1970)**, A note concerning propositions in quantum mechanics, *Ann. der Phys.* **25**, 243–245. [1647]
- Schulte–Mönting, J. (1981)**, Cut elimination and word problem for varieties of lattices, *Algebra Universalis*, **12**, 290–321. [1648]
- Schulte–Mönting, J. (1985)**, Central amalgamation for orthomodular lattices, in *Cologne84*, pp. 291–297. [1649]
- Schultz, F. W. (1974)**, A characterization of state spaces of orthomodular lattices, *J. Comb. Theory*, **17 A**, 317–328. [1650]
- Schultz, F. W. (1975)** see Alfsen, E. M. and F. W. Schultz (1975).
- Schultz, F. W. (1977)**, Events and observables in axiomatic quantum mechanics, *Int. J. Theor. Phys.* **16**, 259–272. [1651]
- Schultz, F. W. (1978)** see Alfsen, E. M., F. W. Schultz, and E. Størmer (1978).
- Schultz, F. W. (1978a,79)** see Alfsen, E. M. and F. W. Schultz (1978,79).
- Schuppli, R. (1985)** see Gross, H., Z. Lomecky, and R. Schuppli (1985).
- Schweigert, D. (1977)**, Affine complete ortholattices, *Proc. Am. Math. Soc.* **67**, 198–200. [1652]
- Schweigert, D. (1981)**, Compatible relations of modular and orthomodular lattices, *Proc. Am. Math. Soc.* **81**, 462–464. [1653]
- Scientia83: Logic in the 20th century. A series of papers on the present state tendencies of studies**, Scientia, Milano (1983). [1654]
- Segal, I. E. (1947)**, Postulates for general quantum mechanics, *Ann. Math.* **48**, 930–948. [1655]
- Segal, I. E. (1953)**, A non–commutative extension of abstract integration, *Ann. Math.* **57**, 401–457. [1656]
- Segal, I. E. (1953a)**, Correction to: “A non–commutative extension of abstract integration”, *Ann. Math.* **58**, 595–596. [1657]
- Segal, I. E. (1981)**, Quantum implications of global space–time structure, in *Tutting80*, pp. 42–63. [1658]
- Selesnick, S. A. (1973)** see Graves, W. H. and S. A. Selesnick (1973).
- Selleri, F. and G. Tarozzi (1978)**, Is nondistributivity for microsystems empirically founded?, *Nuovo Cim.* **43 B**, 31–40. [1659]
- Sarmiento, J. (1986)** see Anger, F. D., J. Sarmiento, and R. V. Rodriguez (1986).
- Serstnev, A. N. (1981)**, On Boolean logics, *Uc. Zap. Kaz. Univ.* **128**, 48–62. [1660]
- Sharma, C. S. (1980)**, Mackey’s eighth axiom and quantum logics, *Phys. Lett. A* **80**, 135–139. [1661]
- Sharma, C. S. (1984)** see Nicholson, G. E., A. Grubb, and C. S. Sharma (1984).
- Sharma, C. S. (1988)**, Quantum theory in complex Hilbert space, *Nuovo Cim.* **102 B**, 325–329. [1662]

- Sharma, C. S. and T. J. Coulson (1987)**, Quantum theory in real Hilbert space, *Nuovo Cim. B* **100**, 417–420. [1663]
- Sharma, C. S. and M. K. Mukherjee (1977)**, An extended characterization theorem for quantum logics, *J. Phys. A* **10**, 1665. [1664]
- Sherman, S. (1956)**, On Segal's postulates for general quantum mechanics, *Ann. Math.* **64**, 593–601. [1665]
- Shimony, A. (1971)**, Filters with infinitely many components, *Found. Phys.* **1**, 325–328. [1666]
- Shimony, A. (1977)** see Hultgren, III, B. O. and A. Shimony (1977).
- Shimony, A. (1988)** see de Obaldia, E., A. Shimony, and F. Wittel (1988).
- Shimony, A. and H. Stein (1979)**, A problem in Hilbert space theory arising from quantum theory of measurement, *Am. Math. Monthly*, **86**, 292–293. [1667]
- Shiva, V. (1978)** see Bub, J. and V. Shiva (1978).
- Šimon, J. (1981)**, Opérations dérivées des treillis orthomodulaires (Part 1), *Acta Univ. Carolin. — Math. Phys.* **22**, No 2, 7–14. [1668]
- Šimon, J. (1982)**, Opérations dérivées des treillis orthomodulaires (Part 2), *Acta Univ. Carolin. — Math. Phys.* **23**, No. 1, 29–36. [1669]
- Šimon, J. (1986)**, Opérations dérivées des treillis orthomodulaires (Part 3), *Acta Univ. Carolin. — Math. Phys.* **27**, No 2, 11–17. [1670]
- Singer, M. (1990)** see Stulpe, W. and M. Singer (1990).
- Singer, M. (1990a)** see Hellwig, K.-E. and M. Singer (1990).
- Šipoš, J. (1978)**, Subalgebras and sublogics of σ -logics, *Math. Slovaca*, **28**, 3–9. [1671]
- Sjödín, T. (1978)** see Ivort, P.-A. and T. Sjödín (1978).
- Sjödín, T. (1980)**, Logikkalküle und Hilbert–Unterraumverband, in **Cologne78**, pp. 93–101. [1672]
- Śniatycki, J. (1987)**, On geometric quantization of classical systems, in **Loyola77**, pp. 287–297. [1673]
- Sobociński, B. (1975)**, A short postulate–system for ortholattices, *Notre Dame J. Formal Logic*, **16**, 141–144. [1674]
- Sobociński, B. (1976)**, A short equational axiomatization of modular ortholattices, *Notre Dame J. Formal Logic*, **17**, 311–316. [1675]
- Sobociński, B. (1976a)**, A short equational axiomatization of orthomodular lattices, *Notre Dame J. Formal Logic*, **17**, 317–320. [1676]
- Sobociński, B. (1976b)**, The modular latticoids, *Notre Dame J. Formal Logic*, **17**, 617–621. [1677]
- Sobociński, B. (1976c)**, The axioms for latticoids and their associative extensions, *Notre Dame J. Formal Logic*, **17**, 625–631. [1678]
- Sobociński, B. (1979)**, Equational two axioms bases for Boolean algebras and some other lattices, *Notre Dame J. Formal Logic*, **20**, 865–879. [1679]
- Solombrino, L. (1983)** see Garola, C. and L. Solombrino (1983).
- Sotirov, V. K. (1972)**, Osnovaniya kvantnovoj logiki, *Doklady Bulg. Akad. Nauk.* **25**, 7–10. [1680]
- Specker, E. (1960)**, Die Logik nicht gleichzeitig entscheidbar Aussagen, *Dialectica*, **14**, 239–246. [1681]

- Specker, E. P. (1965,65a,67)** see Kochen, S. and E. P. Specker (1965–67).
- Specker, E. (1975)**, The logic of propositions which are not simultaneously decidable, [*A translation of Specker, E. (1960)*], in **Hooker75I**, pp. 135–140. [1682]
- Speiser, D. (1962,62a,63)** see Finkelstein, D., J. M. Jauch, S. Schiminovich, and D. Speiser (1962,62a,63).
- Speiser, D. (1979)** see Finkelstein, D., J. M. Jauch, and D. Speiser (1979).
- Srinivas, M. D. (1976)**, Foundations of quantum probability theory, *J. Math. Phys.* **16**, 1672–1685; Reprinted in **Hooker79II**, pp. 227–260. [1683]
- Stachel, J. (1974)**, Comments on ‘The formal representation of physical quantities, in **Cohen, R. S. and M. W. Wartofsky (1974)**, pp. 214–223. [1684]
- Stachel, J. (1976)**, The ‘logic’ of ‘quantum logic,’ in **PSA74**, pp. 515–526. [1685]
- Stachel, J. (1986)**, Do quanta need a new logic, in Colodny, R. G. (ed), *From quarks to quasars. Philosophical problems of modern physics*, [University of Pittsburgh Series in the Philosophy of Science, Vol. 5], University of Pittsburgh Press, Pittsburgh (1986), pp. 229–347. [1686]
- Stachow, E.-W. (1974)** see Mittelstaedt, P. and E.-W. Stachow (1974).
- Stachow, E.-W. (1976)**, Completeness of quantum logic, *J. Phil. Logic*, **5**, 237–280; Reprinted in **Hooker79**, pp. 203–243. [1687]
- Stachow, E.-W. (1977)**, How does quantum logic correspond to physical reality, *J. Phil. Logic*, **6**, 485–496. [1688]
- Stachow, E.-W. (1978)** see Mittelstaedt, P. and E.-W. Stachow (1978).
- Stachow, E.-W. (1978a)**, Quantum logical calculi and lattice structures, *J. Phil. Logic*, **6**, 347–386; Reprinted in **Hooker79**, pp. 245–284. [1689]
- Stachow, E.-W. (1979)**, An operational approach to quantum probability, in **Hooker79**, pp. 285–321. [1690]
- Stachow, E.-W. (1979a)**, Operational approach to quantum probability, in *6th International Congress on Logic, Methodology, and Philosophy of Science*, Hannover (1979), pp. 184–190. [1691]
- Stachow, E.-W. (1980)**, A model theoretic semantics for quantum logic, in **PSA80**, pp. 272–280. [1692]
- Stachow, E.-W. (1980a)**, Logical foundation of quantum mechanics, *Int. J. Theor. Phys.* **19**, 251–304. [1693]
- Stachow, E.-W. (1980b)**, Zur Begründung der Quantenlogik durch die argumentiven Vorbedingungen einer Wissenschaftssprache, in **Cologne80**, pp. 45–58. [1694]
- Stachow, E.-W. (1981)**, Comment on R. Wallace, *Erkenntnis*, **16**, 263–273. [1695]
- Stachow, E.-W. (1981a)**, The propositional language of quantum physics, in **Marsburg79**, pp. 95–107. [1696]
- Stachow, E.-W. (1981b)**, Sequential quantum logic, in **Erice79**, pp. 173–191. [1697]
- Stachow, E.-W. (1981c)**, Der quantenlogische Wahrscheinlichkeitskalkül, in **Nitsch, J., J. Pfarr, und E.-W. Stachow (1981)**, pp. 271–305. [1698]
- Stachow, E.-W. (1983)**, Application of relativistic quantum language to the EPR–Gedankenexperiment, in **Salzburg83**, 232–235. [1699]
- Stachow, E.-W. (1983a)**, Quantum logical description of microsystems, in **Tokyo83**, pp. 244–250. [1700]

- Stachow, E.-W. (1983b)** see Mittelstaedt, P. and E.-W. Stachow (1983).
- Stachow, E.-W. (1985)**, Structures of quantum language for compound systems, in **Joensuu85**, pp. 625–635. [1701]
- Stachow, E.-W. (1985a)**, Structures of quantum language for individual systems, in **Cologne84**, pp. 129–145. [1702]
- Stairs, A. (1982)**, Quantum logic and the Lüders rule, *Phil. Sci.* **49**, 42–436. [1703]
- Stairs, A. (1983)**, On the logic of pairs of quantum systems, *Synthese*, **56**, 47–60. [1704]
- Stairs, A. (1983a)**, Quantum logic, realism, and value definiteness, *Phil. Sci.* **50**, 578–602. [1705]
- Stairs, A. (1985)**, Bub on quantum logic and continuous geometry, *Brit. J. Phil. Sci.* **36**, 313–324. [1706]
- Stairs, A. (1989)**, Book Review: *Peter Gibbins. Particles and Paradoxes: The Limits of Quantum Logics*, *Phil. Sci.* **56**, 712–714. [1707]
- Stehlíková, B. (1986)** see Pulmannová, S. and B. Stehlíková (1986).
- Stehlíková, B. and A. Tirpáková (1990)**, A note on limit theorems on F -quantum spaces, in **Ján90**, pp. 191–194. [1708]
- Stein, H. (1979)** see Shimony, A. and H. Stein (1979).
- Stolz, P. (1969)**, Attempt of an axiomatic foundation of quantum mechanics and more general theories. V, *Commun. Math. Phys.* **11**, 303–313. [1709]
- Stolz, P. (1971)**, Attempt of an axiomatic foundation of quantum mechanics and more general theories. VI, *Commun. Math. Phys.* **23**, 117–126. [1710]
- Stone, M. H. (1949)**, Postulates for the barycentric calculus, *Ann. Math. Pure Appl.* **29**, 25–30. [1711]
- Størmer, E. (1972)**, Spectra of states and asymptotically Abelian C^* -algebras, *Commun. Math. Phys.* **28**, 279–294. [1712]
- Størmer, E. (1978)** see Alfsen, E. M., F. W. Schultz, and E. Størmer (1978).
- Stout, L. N. (1979)**, Laminations or how to build a quantum logic-valued model of set theory, *Manuscripta Math.* **28**, 379–403. [1713]
- Strasbourg74** see Lopes, J. L. and M. Paty (1977).
- Strauss, M. (1936)**, Zur Begründigung der statistischen Transformation Theorie der Quantenphysik, *Sitz. Ber. Berl. Akad. Wiss., Phys.-Math. Kl.* **27**, 90–113. [1714]
- Strauss, M. (1937)**, Mathematics as logical syntax — A method to formalize the language of a physical theory, *Erkenntnis*, **7**, 147–153 (1937–38); Reprinted in **Hooker75I**, pp. 45–52. [1715]
- Strauss, M. (1972)**, The logic of complementarity and the foundation of quantum theory, in Strauss, M. (ed.). *Modern Physics and its philosophy*, D. Reidel, Dordrecht-Holland (1972), pp. 186–203 [A translation of **Strauss, M. (1936)** together with a *postscript* added in 1971]; Reprinted in **Hooker75I**, pp. 27–44. [1716]
- Strauss, M. (1973)**, Two concepts of probability in physics, in Suppes, P., L. Henkin, C. Moisil, and A. Joja (eds.), *Logic, methodology, and philosophy of science*, Vol. IV, North-Holland, Amsterdam (1973), pp. 603–615; Reprinted in **Hooker79II**, pp. 261–274. [1717]
- Strauss, M. (1973a)**, Logics for quantum mechanics, *Found. Phys.* **3**, 265–276. [1718]
- Strawther, D. (1974)** see Gudder, S. P. and D. Strawther (1974).

- Strawther, D. and S. P. Gudder (1975)**, A characterization of strictly convex Banach spaces, *Proc. Am. Math. Soc.* **47**, 268. [1719]
- Strojewski, D. (1985)**, Numerical representation of orthomodular lattices and Boolean algebras with infinite operations, *Bull. Polish Acad. Sci. Math.* **33**, 341–348. [1720]
- Stueckelberg, E. C. G. (1959)**, Field quantisation and time reversal in real Hilbert space, *Helv. Phys. Acta*, **32**, 254–256. [1721]
- Stueckelberg, E. C. G. (1960)**, Quantum theory in real Hilbert space, *Helv. Phys. Acta*, **33**, 727–752. [1722]
- Stueckelberg, E. C. G. and M. Guenin (1961)**, Quantum theory in real Hilbert space. II. (Addenda and errata), *Helv. Phys. Acta*, **34**, 621–628. [1723]
- Stueckelberg, E. C. G. and M. Guenin (1962)**, Théorie des quanta dans l'espace de Hilbert réel. IV: Champs de 2^e espèce (opérateurs de champ antilinéaires), T- and CP-covariance, *Helv. Phys. Acta*, **35**, 673–695. [1724]
- Stueckelberg, E. C. G. and M. Guenin (1962a)**, Antilinear fields and T-, CP-covariance, *Helv. Phys. Acta*, **35**, 326–327. [1725]
- Stueckelberg, E. C. G., M. Guenin, C. Piron, and H. Ruegg (1961)**, Quantum theory in real Hilbert space. III: Fields of the 1st kind (linear field operators), *Helv. Phys. Acta*, **34**, 675–698. [1726]
- Stulpe, W. (1983)** see Hellwig, K.-E. and W. Stulpe (1983).
- Stulpe, W. (1988)**, Conditional expectations, conditional distributions, and *a posteriori* ensembles in generalized probability theory, *Int. J. Theor. Phys.* **27**, 587–611. [1727]
- Stulpe, W. and M. Singer (1990)**, Some remarks on the determination of quantum states by measurements, *Found. Phys. Lett.* **3**, 153–166. [1728]
- Sudarshan, E. C. G. and J. Mehra (1970)**, Classical statistical mechanics of identical particles and quantum effects, *Int. J. Theor. Phys.* **3**, 245–253. [1729]
- Sudkamp, T. A. (1976)**, A proof of Sobociński's conjecture concerning a certain set of lattice-theoretical formulas, *Notre Dame J. Formal Logic*, **17**, 615–616. [1730]
- Suppe, F. and P. D. Asquith (1977)** (eds.), **PSA76**, *Philosophy of Science Association Proceedings 1976*, Philosophy of Science Association, East Lansing, Michigan. [1731]
- Suppes, P. (1965)**, Logics appropriate to empirical theories, in Addison, J. W., L. Henkin, and A. Tarski (eds.), *The theory of models*, North-Holland, Amsterdam (1965), pp. 364–375; Reprinted in **Hooker75I**, pp. 329–340, & **Hooker79II**, p. xx. [1732]
- Suppes, P. (1966)**, The probabilistic argument for a non-classical logic of quantum mechanics, *Phil. Sci.* **33**, 14–21; Reprinted in **Hooker75I**, pp. 341–350, & **Hooker79II**, p. xx. [1733]
- Suppes, P. (1976)** (ed.), *Logic and probability in quantum mechanics*, [Syntese Library, Volume 78], D. Reidel, Dordrecht-Holland. [1734]
- Suppes, P. (1980)** (ed.), *Studies in the foundations of quantum mechanics*, Philosophy of Science Association, East Lansing, Michigan. [1735]

- Suppes, P. and J. C. C. McKinsey (1954)**, Review: Destouches–Février, P. *La structure des théories physiques*, *J. Symb. Logic*, **19**, 52–55. [1736]
- Suppes, P. and M. Zanotti (1976)**, Necessary and sufficient conditions for existence of a unique measure strictly agreeing with a qualitative probability ordering, *J. Phil. Logic*, **5**, 431–438. [1737]
- Suppes, P. and M. Zanotti (1981)**, When are probabilistic explanations possible?, *Synthese*, **48**, 191–199. [1738]
- Suppes76,80** see Suppes, P. (1976,80).
- Süssmann, G. (1958)** see von Weizsäcker, C. F., E. Scheibe, and G. Süssmann (1958).
- Svetlichny, G. (1981)**, On the foundations of experimental statistical sciences, *Found. Phys.* **11**, 741–781. [1739]
- Svetlichny, G. (1982)**, The instrumental complexity of states, *Found. Phys.* **12**, 301–326. [1740]
- Svetlichny, G. (1986)**, Quantum supports and modal logic, *Found. Phys.* **16**, 1285–1295. [1741]
- Svetlichny, G. (1987)** see Cohen, D. W. and G. Svetlichny (1987).
- Svetlichny, G. (1987a)**, Methodological imperfection and formalization of scientific activity, *Int. J. Theor. Phys.* **26**, 221–238. [1742]
- Svetlichny, G. (1990)**, On the inverse EPR problem: Quantum is classical, *Found. Phys.* **20**, 635–650. [1743]
- Swift, A. R. and R. Wright (1980)**, Generalized Stern–Gerlach experiments and the observability of arbitrary spin operators, *J. Math. Phys.* **21**, 77–82. [1744]
- Szabó, L. (1986)**, Quantum causal structures, *J. Math. Phys.* **27**, 2709–2710. [1745]
- Szabó, L. (1987)**, Simple example of quantum causal structures, *Int. J. Theor. Phys.* **26**, 833–843. [1746]
- Szabó, L. (1988)**, Geometry of quantum space time, in Ajduk, Z., S. Pokorski, and A. Trautman (eds.), *New theories in physics*, [Proceedings of the XI Warsaw Symposium on Elementary Particle Physics, Kazimierz, Poland, 23–27 May 1988], World Scientific, Singapore (1988), pp. 517–523. [1747]
- Szabó, L. (1989)**, Quantum causal structures and the Einstein–Podolsky–Rosen experiment, *Int. J. Theor. Phys.* **28**, 35–47. [1748]
- Szambien, H. H. (1986)**, Characterization of projection lattices of Hilbert spaces, *Int. J. Theor. Phys.* **25**, 939–944. [1749]
- Szambien, H. H. (1986a)**, Topological projective geometries, *J. Geom.* **26**, 163–171. [1750]
- Szymańska–Bartman, M. (1979)**, Orthogonality and orthocomplementation in partially ordered sets, *Demonstratio Math.* **12**, 529–542. [1751]
- Takesue, K. (1985)**, Spatial theory for algebras of unbounded operators, *Rep. Math. Phys.* **21**, 347–355. [1752]
- Takeuti, G. (1981)**, Quantum set theory, in **Erice79**, pp. 303–322. [1753]
- Takeuti, G. (1983)**, Quantum logic and quantization, in **Tokyo83**, pp. 256–260. [1754]
- Takeuti, G. (1983a)**, von Neumann algebras and Boolean valued analysis, *J. Math. Japan*, **35**, 1–21. [1755]
- Tamascke, O. (1960)**, Submodulare Verbände, *Math. Z.* **74**, 186–190. [1756]

- Tamura, S. (1988)**, A Gentzen formulation without the cut rule for ortholattices, *Kobe J. Math.* **5**, 133–150. [1757]
- Tarozzi, G. (1978)** see Selleri, F. and G. Tarozzi (1978).
- Teller, P. (1978)** see Fine, A. I. and P. Teller (1978).
- Tengstrand, G. (1980)** see Mielnik, B. and G. Tengstrand (1980).
- Thakare, N. K. (1985)** see Maeda, S., N. K. Thakare, and M. P. Wasadikar (1985).
- Thakare, N. K., M. P. Wasadikar, and S. Maeda (1984)**, On modular pairs in semilattices, *Algebra Universalis*, **18**, 255–265. [1758]
- Thieffine, F. (1980,81)** see Hadjisavvas, N., F. Thieffine, and M. Mugur–Schächter (1980,81).
- Thieffine, F. (1983)**, Compatible complement in Piron’s system and ordinary modal logic, *Lett. Nuovo Cim.* **36**, 377–381. [1759]
- Thieffine, F. (1984)** see Hadjisavvas, N. and F. Thieffine (1984).
- Thieffine, F. and D. Evrard (1987)**, Logic, probability, and models: Hidden variables and semantical constraints in quantum mechanics, in **Moscow87**, Vol. 2, pp. 164–165. [1760]
- Thieffine, F., N. Hadjisavvas, and M. Mugur–Schächter (1981)**, Supplement to a critique of Piron’s system of questions and propositions, *Found. Phys.* **11**, 645–649. [1761]
- Tirpáková, A. (1988)**, On a sum of observables in F–quantum spaces and its application to convergence theorems, in **Ján88**, 161–166. [1762]
- Tirpáková, A. (1988a,89)** see Dvurečenskij, A. and A. Tirpáková (1988,89).
- Tirpáková, A. (1989a)**, The Hahn–Jordan decomposition on fuzzy quantum spaces, *Bull. Sous-Ensembl. Flous Appl.* **38**, 66–77. [1763]
- Tirpáková, A. (1990)** see Stehlíková, B. and A. Tirpáková (1990).
- Tischer, J. (1982)**, Gleason’s theorem for type I von Neumann algebras, *Pacif. J. Math.* **100**, 473–488. [1764]
- Tkadlec, J. (1988)** see Pták, P. and J. Tkadlec (1988).
- Tkadlec, J. (1988a)**, Function representation of orthomodular posets, in **Ján88**, pp. 167–169. [1765]
- Tkadlec, J. (1989)**, A note on a function representation of orthomodular posets, *Math. Slovaca* **39**, 27–29. [1766]
- Tkadlec, J. (1990)**, Set representations of orthoposets, in **Ján90**, pp. 204–207. [1767]
- Tokyo83**: Kamefuchi, S., H. Ezawa, Y. Murayama, M. Namiki, S. Nomura, Y. Ohnuki, and T. Yajima (eds.), *Proceedings of the international symposium Foundations of quantum mechanics in the light of new technology — Tokyo, August 29–31, 1983*, Hitachi, Tokyo. [1768]
- Tokyo86**: *Proceedings of the 2nd international symposium Foundations of quantum mechanics in the light of new technology — Tokyo, 1986*, Hitachi, Tokyo. [1769]
- Tomé, W. and S. Gudder (1990)**, Convergence of observables on quantum logics, *Found. Phys.* **20**, 417–434. [1770]
- Topping, D. M. (1967)**, Asymptoticity and semimodularity in projection lattices, *Pacif. J. Math.* **20**, 317–325. [1771]

- Toraldo di Francia, G. (1973,76)** see Dalla Chiara, M. L. and G. Toraldo di Francia (1973,76).
- Toraldo di Francia, G. (1977)** (ed.), *Problems in the foundations of physics. Proceedings of the international school of physics "Enrico Fermi", Course 72, Varenna on Lake Como, Villa Monastero, 25th July – 6th August 1977*, North-Holland, Amsterdam. [1772]
- Toraldo di Francia, G. (1979,85,85a)** see Dalla Chiara, M. L. and G. Toraldo di Francia (1979–85a).
- Toraldo di Francia, G. (1985b)**, Connotation and denotation in microphysics, in *Cologne84*, pp. 203–214. [1773]
- Toraldo di Francia, G. (1988)** see Dalla Chiara, M. L. and G. Toraldo di Francia (1988).
- Törnebohm, H. (1957)**, On two logical systems proposed in the philosophy of quantum mechanics, *Theoria*, **23**, 84–101. [1774]
- Törös, R. (1970)** see Fáy, Gy. and R. Törös (1970).
- Traczyk, T. (1973,75)** see Mączyński, M. and T. Traczyk (1973,75).
- Trieste72** see Mehra, J. (1973).
- Trnková, V. (1987)** see Kallus, M. and V. Trnková (1987).
- Trnková, V. (1988)**, Symmetries and state of automorphisms of quantum logics, in *Ján88*, pp. 170–175. [1775]
- Trnková, V. (1989)**, Automorphisms and symmetries of quantum logics, *Int. J. Theor. Phys.* **28**, 1195–1214, + Errata, *Ibid.* **29**, 1039–1040 (1990). [1776]
- Truini, P. (1979,84,85)** see Cassinelli, G. and P. Truini (1979–85).
- Truini, P. and L. C. Biedenharn (1985)**, Imprimitivity theorem and quaternionic mechanics, in *Tutzing80*, p. 237. [1777]
- Tunncliffe, W. R. (1974)**, The completion of partially ordered set with respect to a polarization, *Proc. London Math. Soc.* **28**, 13–27. [1778]
- Turner, J. (1968)**, Violation of the quantum ordering of positions in hidden variable theories, *J. Math. Phys.* **9**, 1411–1415. [1779]
- Turquette, A. R. (1945)**, Review of Reichenbach's *Philosophical foundations of quantum mechanics*, *Phil. Rev.* **54**, 513–516. [1780]
- Tutsch, J. H. (1971)**, Mathematics of the measurement problem in quantum mechanics, *J. Math. Phys.* **12**, 1711–1718. [1781]
- Tutzing78,80,82** see Castell, L. and C. F. von Weizsäcker (1979,81,83).
- Umegaki, H. (1954)**, Conditional expectation in an operator algebra, *Tôhoku Math. J.* **6**, 171–181 (1954). [1782]
- Umegaki, H. (1956)**, Conditional expectation in an operator algebra. II, *Tôhoku Math. J.* **8**, 86–100. [1783]
- Urbanik, K. (1985)**, Joint distribution and commutability of observables, *Demonstratio Math.* **18**, 31–41. [1784]
- Urbanik, K. (1987)**, Remarks on joint distribution of observables, *Colloq. Math.* **53**, 309–314. [1785]
- Valdes Franco, V. (1983)** see Gutkowski, D. and M. V. Valdes Franco (1983).
- van Aken, J. (1985)**, Analysis of quantum probability theory. I, *J. Phil. Logic*, **14**, 267–296. [1786]

- van Aken, J. (1986), Analysis of quantum probability theory. II, *J. Phil. Logic*, **15**, 333–367. [1787]
- van der Merwe, A. (1983) (ed.), *Old and new questions in physics, cosmology, philosophy, and theoretical biology. Essays in honor of Wolfgang Yourgrau*, Plenum Press, New York. [1788]
- van Fraassen, B. C. (1973), Semantic analysis of quantum logic, in **Ontario71**, pp. 80–113. [1789]
- van Fraassen, B. C. (1974), The formal representations of physical quantities, in Cohen, R. S. and M. W. Wartofsky (1974), pp. 196–209. [1790]
- van Fraassen, B. C. (1974a), The labyrinth of quantum logics, in Cohen, R. S. and M. W. Wartofsky (1974), 224–254; Reprinted in **Hooker75I**, 577–607. [1791]
- van Fraassen, B. C. (1974b), The Einstein-Podolsky-Rosen paradox, *Synthese*, **29**, 291–309; Reprinted in **Suppes76**, pp. 283–301. [1792]
- van Fraassen, B. C. (1974c), Hidden variables in conditional logic, *Theoria*, **40**, 176–190. [1793]
- van Fraassen, B. C. (1979), Foundations of probability: A modal frequency interpretation, in **Fermi77**, pp. 344–394. [1794]
- van Fraassen, B. C. (1979a), Hidden variables and the modal interpretation of quantum theory, *Synthese*, **41**, 155–165. [1795]
- van Fraassen, B. C. (1981), Assumptions and interpretations of quantum logic, in **Erice79**, pp. 17–31. [1796]
- van Fraassen, B. C. (1981a), A modal interpretation of quantum mechanics, in **Erice79**, pp. 229–258. [1797]
- van Fraassen, B. C. (1985), Statistical behaviour of indistinguishable particles, in **Cologne84**, pp. 161–187. [1798]
- van Lambalgen, M. (1983,85) see Cooke, R. M. and M. van Lambalgen (1983,85).
- Varadarajan, V. S. (1962), Probability in physics and a theorem on simultaneous observability, *Comm. Pure. Appl. Math.* **15**, 189–217; Reprinted in **Hooker75I**, pp. 171–203 & **Hooker79II**, pp. xvii–xix. [1799]
- Varadarajan, V. S. (1968/70), *Geometry of quantum theory*, Vols. 1 & 2, Van Nostrand, Princeton. [1800]
- Vasyukov, V. L. (1987), Quantum logic of observables as converse semantical problem, in **Moscow87**, pp. 357–359. [1801]
- Vienna84** see Eigenthaler, G. et al (1985).
- Volau, P. (1980), The measure extension problem on ortholattices, *Acta Math. Univ. Comenian.* **36**, 171–177. [1802]
- von Neumann, J. (1934) see Jordan, P., J. von Neumann, and E. Wigner (1934).
- von Neumann, J. (1935) see Jordan, P. and J. von Neumann (1935).
- von Neumann, J. (1936) see Birkhoff, G. and J. von Neumann (1936).
- von Neumann, J. (1936a) see Murray, F. J. and J. von Neumann (1936a).
- von Neumann, J. (1940), On rings of operators. III, *Ann. Math.* **41**, 94–161; Reprinted in von Neumann, J., *Collected works, Vol. III*, Pergamon Press, Oxford (1961), pp. 161–228. [1803]

- von Weizsäcker, C. F. (1955)**, Komplementarität und Logik, *Naturwiss.* **42**, 521–529, 545–555. [1804]
- von Weizsäcker, C. F. (1958)**, Die Quantentheorie der einfachen Alternative (Komplementarität und Logik II), *Z. Naturforsch.* **13 a**, 245–253. [1805]
- von Weizsäcker, C. F. (1973)**, Probability and quantum mechanics, *Brit. J. Phil. Sci.* **24**, 321–337. [1806]
- von Weizsäcker, C. F. (1973a)**, Classical and quantum descriptions, in **Trieste73**, pp. 635–667. [1807]
- von Weizsäcker, C. F. (1981)**, In welchem Sinne ist die Quantenlogik eine zeitliche Logik, in **Nitsch, J., J. Pfarr, und E. -W. Stachow (1980)**, pp. 311–317. [1808]
- von Weizsäcker, C. F., E. Sheibe, und G. Süßmann (1958)**, Komplementarität und Logik. III. Mehrfache Quantelung, *Z. Naturforsch.* **13 a**, 705–721. [1809]
- Vrábel, P. (1981)**, The measure extension theorem for subadditive measures in σ -continuous logics, *Math. Slovaca*, **31**, 141–147. [1810]
- Vujošević, A. (1981)** see Kron, A., Z. Marić, and S. Vujošević (1981).
- Walker, J. W. (1983)**, From graphs to ortholattices and equivariant maps, *J. Comb. Theory.* **35 B**, 171–192. [1811]
- Wallace, R. (1981)**, A new approach to probabilities in mechanics, *Erkenntnis*, **16**, 243–262. [1812]
- Wang, H. (1987)**, Boolean lattice, fuzzy lattice, and extension lattice, *Bull. Sous-Ensembl. Flous Appl.* **32**, 32–38. [1813]
- Warsaw74**, see Przelecki, M. et al. (1977). [1814]
- Wasadikar, M. P. (1984)** see Thakare, N. K., M. P. Wasadikar, and S. Maeda (1984).
- Wasadikar, M. P. (1985)** see Maeda, S., N. K. Thakare, and M. P. Wasadikar (1985).
- Watanabe, S. (1966)**, Algebra of observation, *Progr. Theor. Phys. Suppl.* **37 & 38**, 350–367. [1815]
- Watanabe, S. (1969)**, Modified concepts of logic, probability, and information based on generalized continuous characteristic function, *Inform. Control*, **15**, 1–21. [1816]
- Weingartner, P. (1983)** (ed.), *Abstracts of the 7th international congress on logic, methodology, and philosophy of science*, [Salzburg, July 11–16, 1983], J. Huttegger OHG, Salzburg. [1817]
- Weizsäcker, von, C. F.** see von Weizsäcker, C. F.
- Wenning, T. (1982)** see Bach, A. and T. Wenning (1982).
- Wenning, T. and A. Bach (1983)**, A probabilistic formulation of quantum theory. III, *J. Math. Phys.* **24**, 1120–1122. [1818]
- Werner, R. (1981)** see Gerstberger, H., H. Neumann, and R. Werner (1981).
- Werner, R. (1983)** see Neumann, H. and R. Werner (1983).
- Wheeler, J. A. (1981)**, The elementary quantum act as higgledy–piggledy building mechanism, in **Tutzing80**, pp. 27–30. [1819]
- Wigner, E. (1934)** see Jordan, P., J. von Neumann, and E. Wigner (1934).
- Wilbur, W. J. (1975)**, Quantum logic and the locally convex spaces, *Trans. Am. Math. Soc.* **207**, 343–360. [1820]
- Wilbur, W. J. (1977)**, On characterizing the standard quantum logics, *Trans. Am. Math. Soc.* **233**, 265–282. [1821]

- Wilce, A. (1990)**, Tensor product of frame manuals, *Int. J. Theor. Phys.* **29**, 805–814. [1822]
- Wilde, I. F. (1976)**, *Aspects of algebraic quantum theory*, [IFUSP/P–113], Instituto de física, Universidade de São Paulo, São Paulo. [1823]
- Wirth, J. F. (1983)** see Adler, C. G. and J. F. Wirth (1983).
- Wittel, F. (1988)** see de Obaldia, E., A. Shimony, and F. Wittel (1988).
- Wright, J. D. M. (1984,85,85a)** see Bunce, L. J. and J. D. M. Wright (1984,85,85a).
- Wright, J. D. M. (1985b)** see Bunce, L. J., M. Navara, P. Pták, and J. D. M. Wright (1985).
- Wright, J. D. M. (1985c)** see Pták, P. and J. D. M. Wright (1985).
- Wright, R. (1977)**, The structure of projection-valued states: A generalization of Wigner's theorem, *Int. J. Theor. Phys.* **16**, 567–573. [1824]
- Wright, R. (1978)**, Spin manuals: Empirical logic talks quantum mechanics, in **Loyola77**, pp. 177–254. [1825]
- Wright, R. (1978a)**, The state of the pentagon: A nonclassical example, in **Loyola77**, pp. 255–274. [1826]
- Wright, R. (1980)** see Swift, A. R. and R. Wright (1980).
- Wright, R. (1990)**, Generalized urn models, *Found. Phys.* **20**, 881–903. [1827]
- Xu, Y. (1989)**, Lattice-valued logic and three-valued logic, *Bull. Sous-Ensembl. Flous Appl.* **38**, 47–50. [1828]
- Yates, J. (1969)**, Computers and physical axiomatics, *Int. J. Theor. Phys.* **2**, 297–299. [1829]
- Yeadon, F. J. (1983)**, Measures on projections in W^* -algebras of type II_1 , *Bull. London Math. Soc.* **15**, 139–145. [1830]
- Yeadon, F. J. (1984)**, Finitely additive measures on projections in finite W^* -algebras, *Bull. London Math. Soc.* **16**, 145–150. [1831]
- Ylinen, K. (1985)**, On a theorem of Gudder on joint distributions of observables, in **Joensuu85**, pp. 691–694. [1832]
- Younce, M. B. (1990)**, Refinement and unique Mackey decomposition for manuals and orthoalgebras, *Found. Phys.* **20**, 691–700. [1833]
- Yourgrau, W. (1977,78)** see Benoist, R. W., J.-P. Marchand, and W. Yourgrau (1977,78).
- Zabey, Ph. Ch. (1969)** see Eckmann, J.-P. and Ph. Ch. Zabey (1969).
- Zabey, P. C. (1975)**, Reconstruction theorems in quantum mechanics, *Found. Phys.* **5**, 323–342. [1834]
- Zanghí, N. (1983,84)** see Cassinelli, G. and N. Zanghí (1983,84).
- Zanghí, N. (1984a)** see Gudder, S. and N. Zanghí (1984).
- Zanotti, M. (1976)** see Suppes, P. and M. Zanotti (1976).
- Zapatrin, R. R. (1989)**, Binary quantum logic and generating semigroups, *Int. J. Theor. Phys.* **28**, 1323–1332. [1835]
- Zapatrin, R. R. (1990)**, Graph representation of finite ortholattices, in **Ján90**, pp. 213–218. [1835A]
- Zapatrin, R. R. (1990)** see Grib, A. A. and R. R. Zapatrin (1990).
- Zecca, A. (1973)** see Gallone, F. and A. Zecca (1973).
- Zecca, A. (1974)** see Berzi, V. and A. Zecca (1974).

- Zecca, A. (1975)** see Gorini, V. and A. Zecca (1975).
- Zecca, A. (1976)**, On superposition and entropy in quantum dynamics, *Int. J. Theor. Phys.* **15**, 785–791. [1836]
- Zecca, A. (1978)**, On the coupling of logics, *J. Math. Phys.* **19**, 1482–1485. [1837]
- Zecca, A. (1980)**, Dirac's superposition of pure states extended to the statistical operators, *Int. J. Theor. Phys.* **19**, 629–634. [1838]
- Zecca, A. (1981)**, The superposition of states and the logic approach to quantum mechanics, *Int. J. Theor. Phys.* **20**, 191–230. [1839]
- Zecca, A. (1981a)**, Products of logics, in **Erice**, pp. 405–412. [1840]
- Zeh, H. D. (1971)**, On the irreversibility of time and observation in quantum theory, in **Fermi70**, pp. 263–273. [1841]
- Zeh, H. D. (1979)**, Quantum theory and time asymmetry, *Found. Phys.* **9**, 803–818. [1842]
- Zeman, J. J. (1974)**, Quantum logic with implication, *J. Symb. Logic*, **39**, 391. [1843]
- Zeman, J. J. (1978)**, Generalized normal logic, *J. Phil. Logic*, **7**, 225–243. [1844]
- Zeman, J. J. (1979)**, Quantum logic with implication, *Notre Dame J. Formal Logic*, **20**, 723–728. [1845]
- Zeman, J. J. (1979a)**, Normal, Sasaki, and classical implications, *J. Phil. Logic*, **8**, 243–245. [1846]
- Zerbe, J. (1981)** see Gudder, S. and J. Zerbe (1981).
- Zerbe, J. and S. P. Gudder (1985)**, Additivity of integrals on generalized measure spaces, *J. Comb. Theory*, **39 A**, 42–51. [1847]
- Zierler, N. (1961)**, Axioms for non-relativistic quantum mechanics, *Pacif. J. Math.* **11**, 1151–1169; Reprinted in **Hooker75I**, pp. 149–170. [1848]
- Zierler, N. (1963)**, Order properties of bounded observables, *Proc. Am. Math. Soc.* **14**, 346–351. [1849]
- Zierler, N. (1966)**, On the lattice of closed subspaces of Hilbert space, *Pacif. J. Math.* **19**, 583–586. [1850]
- Zierler, N. and M. Schlessinger (1965)**, Boolean embeddings of orthomodular sets and quantum logic, *Duke Math. J.* **32**, 251–262; Reprinted in **Hooker75I**, pp. 247–262. [1851]
- Zoubek, G. (1981)** see Essler, W. K. and G. Zoubek (1981).

1

Index

- *-order 975
- *-ring 975, 1216.
- *-structures 1021
- *-valuations 919
- *-fields 918, 919.
- AC-lattice 843, 1329
- additive,-ity 232, 324, 416, 445, 452-3, 799, 1354, 1358, 1426, 1585, 1831, 1847.
- Aerts 255
- affine 1003, 1540, 1652.
- algebraic 6, 43, 113, 140, 174, 253, 262, 378, 470, 516, 718, 743, 803, 905, 922-3, 1010, 1266, 1281, 1568, 1570-1, 1592, 1626, 1823.
- amalgamation 101, 659, 1088, 1649.
- amplitude 757, 762, 764-5, 791, 1521, 1525, 1531.
- Arguesian (Desarguesian) 583, 837, 904, 1002, 1004, 1108.
- atom 238, 672, 681, 1020, 1170, 1533.
- atomic 672, 1179, 1213, 1215, 1557, 1591.
- atomicity 69, 992-3, 1099.
- atomistic 665, 1017, 1020, 1221.
- automorphism 594, 673, 715, 721, 1030, 1051, 1100-1, 1360, 1642-3, 1776.
- Baer 240, 267, 557, 560, 562, 742, 787, 917, 959, 1127, 1209, 1225, 1460.
- Banach 197, 298, 1082, 1191, 1344, 1378, 1719.
- Bell 24, 163, 184, 946, 1333, 1544-5.
- Birkhoff 133, 276, 1077, 1227, 1462.
- block 152, 156-7, 284.
- Boole 59, 69, 107, 109, 112, 316-9, 321, 377, 859, 864, 934, 953, 1067-8, 1088, 1091, 1099, 1142, 1182-3, 1185, 1365, 1413, 1487, 1567, 1598, 1660, 1679, 1720, 1755, 1813, 1851.
- Brouwer-Zadeh 246, 639-40.
- Bub 138-9, 161, 645, 928, 1706,
- C^* -algebra 1, 2, 33, 354, 422, 1218-9, 1457, 1712.
- Cantoni 730, 833, 1523.
- categorical 67
- category 32, 908-9, 1458.
- causal 225, 256-7, 537, 1000, 1745-6, 1748.
- causality 258, 555, 1385.
- center *see* centre
- central 6, 110, 315, 426, 1535, 1649.
- centre 126, 269, 270, 474, 779, 962, 969, 988, 1047, 1360, 1480, 1482, 1594.
- chain 664, 695, 869, 898, 1233.
- classical logic 117, 487, 879.
- classical system 22, 1376-7, 1673.
- closed subspaces 148, 644, 840-1, 1050, 1850.
- commensurability 806
- commutativity 112, 307, 647, 1118.
- commutator 157, 268, 680, 1249, 1458, 1516.
- commuting 989, 1198, 1556.
- compact 1470, 1478, 1540.
- compatibility 144-5, 273-4, 323, 447-8, 457, 460, 851, 853, 898, 1337, 1374, 1504, 1508.
- compatible 435-6, 1336, 1384, 1476, 1653, 1759.
- complement,-ed,-arity 44, 46, 206, 395-7, 450, 539, 588, 592, 878, 962, 964, 966, 973, 1113, 1115, 1117-8, 1217, 1316, 1386, 1459, 1716, 1759.
- compound physical systems 18
- computability 1469
- computation,-al 539, 1468.
- computer 496, 1829.
- conditional 848-9, 855, 1569, 1577, 1793.
- conditional expectation 10, 784, 886, 1350-1, 1727, 1782-3.
- conditional probability 171, 177, 228-9, 231-2, 480, 591, 822, 824, 1018, 1349, 1569, 1577,

- conditioning,-alization 169, 231, 367-8, 370, 566, 570.
 connection 28, 70, 297, 312, 457, 1040, 1135-6, 1173.
 connective 401, 901, 1548.
 constructible 14, 968, 1639.
 construction 22-3, 101, 163, 310, 439, 974, 1167, 1268, 1328, 1367, 1369, 1465, 1602, 1834.
 constructive 1104, 1105, 1470.
 continuous geometry 420, 839, 1043, 1706.
 convergence 63, 425, 788, 801, 1397, 1414, 1762, 1770.
 convex 94, 96, 203, 668, 720, 727, 743, 892, 1087, 1122, 1147, 1540, 1616, 1625, 1719, 1820.
 coordinatization,-ing 311, 359, 561, 587-8, 709, 796, 998, 1324.
 counter 1617
 covering 817-8, 872, 1215, 1393.
 decomposability 86.
 decomposition 6, 79, 221, 268, 294, 434, 1078, 1608-9, 1612, 1622, 1624, 1636-7, 1638, 1763, 1833.
 density 258, 362, 1619.
 Desargues *see* Argues
 determinism,-tic 69, 344, 555, 1099, 1445.
 dimension,-al 68, 187, 578, 592, 608, 670, 686-7, 749, 758, 761, 911, 1014, 1015, 1053, 1143, 1176, 1191, 1208, 1212, 1327, 1450, 1555.
 dispersion-free 380, 704, 1139, 1481.
 distributive,-ity 115, 120-1, 314, 320, 398, 580, 620, 671, 675, 912, 935, 1193, 1196, 1222, 1254, 1262.
 dynamical 351, 411, 808, 1235-6, 1238, 1466.
 dynamics 529, 538, 629, 657, 766, 1546.
 effect 146, 225, 244, 250, 328-9, 350, 724, 885, 1085-6, 1375, 1383, 1729.
 Einstein—Podolsky—Rosen (EPR) 179, 181, 346, 1063-4, 1123, 1265, 1305, 1310, 1319, 1384, 1406, 1409, 1549, 1699, 1743, 1748, 1792.
 embedding 240, 365, 402, 601, 737, 786, 1055, 1245, 1268, 1851.
 empirical 297, 334, 338, 419, 568-9, 574, 625, 897, 1061, 1242, 1477, 1537, 1558, 1659, 1732, 1825.
 empiricism 75, 1311.
 entropy 349, 882, 1235, 1237-8, 1411, 1836.
 EPR *see* Einstein—Podolsky—Rosen.
 equational 15, 60-1, 358, 610, 659, 1260, 1675-6, 1679.
 ergodic 463, 467, 865, 1175, 1510.
 event 166, 231, 239-40, 253, 309, 821, 829, 1136, 1426, 1551, 1573-4, 1651.
 evolution 811, 992, 1272, 1438, 1467.
 expectation 10, 740, 756, 784, 886, 1112, 1350-1, 1617, 1727, 1782-3.
 extensibility 1509
 extreme points 1054-8.
 face 1610
 facial 262, 476, 478.
 filter 327, 817, 898, 1274, 1666.
 finite 92, 108, 115, 148, 151, 155-6, 309, 353, 430, 445, 453, 469, 611, 673, 680, 749-50, 758, 768, 789, 793-4, 843, 903, 947, 1078, 1111, 1221, 1256, 1356, 1386, 1458-9, 1600, 1609, 1612, 1636, 1642, 1831, 1835A.
 finite dimensional 749, 758.
 functional 297, 756, 764, 798, 1189-0, 1199, 1518, 1617.
 fuzzy 239-41, 246, 251, 253, 447-8, 825-6, 1073, 1141, 1235-6, 1426, 1541-3, 1546, 1548, 1587, 1763, 1813.
 generalized quantum mech. 1275, 1475.
 geometrical,-y 38, 47, 201, 203, 209, 293, 295, 357-8, 370, 391, 420, 468, 532, 551, 561, 586, 668, 690, 695, 839, 1003, 1007, 1043, 1273, 1531, 1544, 1627, 1637, 1706, 1747, 1750, 1800.

- GL 476, 480, 813-4.
 Gleason 304, 433-4, 430, 441, 451, 483, 1257, 1401, 1764.
 graph 48, 755, 761, 766, 1626, 1643, 1811, 1835A.
 graphics 760
 group 418, 594, 673, 715, 949, 1030, 1083, 1360, 1126, 1642-3.
 Hahn–Jordan 294, 434, 1402, 1609, 1763.
 hidden (variables, etc) 76, 128, 138, 139, 161, 167, 175, 184, 187, 361, 516, 641, 703-4, 738, 777, 906, 985, 1072, 1130, 1481, 1488, 1550, 1568, 1570-1, 1760, 1779, 1793, 1795.
 Hilbert lattice 688, 690, 692, 1032, 1241, 1254, 1326-7.
 Hilbertian 746, 1117, 1120.
 homomorphism 999, 1019, 1103.
 hypergraph 782, 792-3, 1061-2, 1368, 1639.
 ideal,-s 116, 266, 479, 958, 1211, 1623.
 implication 7, 9, 191, 336, 492, 503, 610, 859-61, 901, 1060, 1239, 1419, 1452, 1603, 1658, 1843, 1845-6.
 implicative 237, 652, 1250.
 imprimitivity 230, 1777.
 indeterministic 344
 infinite 293-4, 430, 437, 695, 1450, 1666, 1720.
 infinite dimensional,-s 686, 1191.
 information 68, 239, 578, 592, 686, 1053, 1176, 1191, 1327, 1450, 1466.
 inner product 68, 219, 252, 440, 442, 444-5, 451, 453, 458, 578, 723, 725, 780, 847, 1009, 1199.
 interpretation 30, 165, 182, 375, 408, 495, 514, 645, 746, 852, 857, 906, 931, 950, 1076, 1124, 1289-90, 1321, 1380-1, 1404, 1410-2, 1423, 1462, 1583, 1794-7.
 isometries 477, 685, 949.
 isomorphism 49, 277-8, 685, 916, 1236.
 Jauch–Piron 43, 200, 242, 1486, 1600, 1611.
 joint distribution 323, 429, 435-8, 456-7, 460, 705, 1502, 1504, 1520, 1528, 1784-5, 1832.
 Jordan 39-41, 202, 294, 434, 491, 869, 1257, 1402, 1609, 1612, 1618, 1622, 1637, 1638, 1763.
 Kripke 336, 1281.
 language 194, 196, 338, 507, 575, 602, 626, 642, 1107, 1167, 1303-4, 1313-4, 1646, 1696, 1699, 1701-2, 1715.
 law of large numbers 426, 895, 1395, 1397, 1535.
 local 64, 605-6, 1570, 1820.
 locality 163, 167-8, 174, 377-8, 751.
 Lorentz 1435-6.
 Łukasiewicz 254, 404, 624.
 Lüders 1253, 1703.
 Mackey 778, 913, 1012-3, 1181, 1195, 1449, 1457, 1501, 1661, 1833.
 manual 297-8, 309, 550, 571-2, 581, 746, 1561, 1646, 1822, 1825, 1833.
 Markov 797, 810, 1233.
 measure 36-7, 148, 192, 202, 275, 307, 415, 430, 433-4, 437, 439, 442, 455, 459, 461-2, 607-8, 644, 719, 726, 741, 752, 755, 785, 788, 793, 844-6, 952, 1032, 1034, 1048, 1052-3, 1082, 1102, 1129, 1185, 1223-4, 1252, 1256, 1323, 1359, 1361, 1364, 1401, 1415, 1426, 1494, 1496, 1530, 1534, 1543, 1585, 1590, 1595, 1624-5, 1629, 1636, 1736, 1802, 1810, 1830-1, 1847.
 measurement 99, 172, 226-7, 261, 324, 331, 363, 411, 491, 512, 631, 747, 795, 815, 887-91, 896, 899, 979, 983, 995, 1252, 1316, 1335, 1411, 1421, 1424, 1437, 1476, 1667, 1728, 1781.
 metric 216, 825, 1009, 1324.
 Mielnik 369, 830, 1523.
 minimal quantum logic *see* orthologic
 mixture 79, 86, 308, 727, 832.
 modal 204-5, 223, 332, 384, 389, 402, 404, 852, 902, 925, 1300, 1303, 1576, 1741, 1759, 1794-5, 1797.

- modular 11, 32, 44, 46, 49, 50-2, 60, 102, 153, 328-9, 357, 359, 558, 582-3, 588, 592, 650, 659, 842, 843, 903, 913, 939, 972, 1002, 1044-4, 1078-80, 1081, 1128, 1180, 1195, 1213, 1221, 1386, 1555, 1594, 1653, 1644, 1653, 1677, 1758.
- morphism 571
- motion 1278, 1280.
- Neumark 41
- non-Boolean 166, 171, 193, 1472.
- nonclassical 337, 490, 623, 624, 827, 1340, 1733, 1826.
- noncommutative 38, 40, 628, 781, 783, 1323, 1656-7.
- nondistributive,-ity 330, 1659.
- nonlinear 141, 1102, 798, 1277.
- nonmodular 662
- nonrelativistic 807, 812, 1848.
- nonseparable,-ility 382, 483.
- observable 279, 289, 323, 349, 360, 412-3, 427-8, 435-7, 449-50, 454, 456, 460, 464, 466, 471, 699, 700-1, 704-6, 710, 722, 788, 790, 792, 896, 977-8, 989, 1073, 1075, 1083, 1097, 1112, 1121, 1125, 1141, 1183-4, 1316, 1350, 1353, 1375, 1427, 1429, 1476, 1478, 1483, 1490, 1494, 1502, 1504-5, 1507, 1514, 1520, 1528-9, 1556, 1596-7, 1617, 1651, 1762, 1770, 1784-5, 1801, 1832, 1849.
- observational 510
- operation 146, 289, 350, 412, 472-3, 818, 887-8, 1085-6, 1469, 1560, 1720.
- operational 4-6, 192, 194, 356, 470-1, 567, 639, 720, 733, 775, 882, 924, 1138, 1317, 1402, 1560, 1562, 1564-5, 1690-1, 1720.
- operationalism 564
- order 3, 136-7, 392, 400, 584-5, 839, 977-6, 1057, 1129.
- ordered,-ing 211, 243, 248, 600, 604, 867, 918-9, 941, 945, 949, 1014-5, 1057, 1068, 1193, 1202, 1204, 1242, 1350, 1378, 1495, 1630, 1737, 1779.
- orthoautomorphism 1326
- orthocomplement,-ed,-ation 11, 245, 248-9, 273, 499, 552-3, 600, 673, 689, 796, 942, 1043, 1046, 1179-80, 1193, 1276, 1347, 1555, 1628, 1179, 1180.
- orthogonal 245, 249, 312, 504, 565, 695, 798, 798-9, 832, 844-6, 871-4, 895, 898, 900, 941, 1087, 1187, 1337, 1453, 1533, 1559, 1612, 1751.
- orthoimplication 9, 1060.
- ortholattice 105, 150, 153, 394, 554, 650, 654, 903, 1261-2, 1458, 1522, 1594, 1629, 1652, 1674-5, 1757, 1802, 1811, 1835A.
- orthologic (minimal quantum logic) 399, 400, 653, 988-90, 1330, 1419.
- orthomodular lattice 15, 32, 90-3, 95, 100-4, 106, 108, 110-6, 119, 121-2, 130, 151-2, 154-60, 221, 229, 236-8, 266, 268-70, 312, 314, 392, 394, 492, 505, 558-9, 566, 607, 610, 648-9, 651, 661, 663-4, 667, 671-2, 675, 677, 680-1, 691, 715, 864, 891, 901, 912, 914-6, 943-4, 954, 957, 963, 967, 969, 1017, 1021, 1025-6, 1029, 1030, 1031, 1035, 1103, 1206, 1248-9, 1251, 1254, 1259-60, 1284, 1367, 1370, 1452, 1454, 1516, 1533, 1557, 1599, 1603, 1607, 1608, 1642, 1644, 1649-50, 1653, 1676, 1720.
- orthomodular logic 1023-4.
- orthomodularity 504, 609, 655, 1128, 1194, 1202, 1214, 1325, 1328, 1604.
- paradigm 183, 292.
- paradox 19, 183, 292, 331, 346, 401, 411, 619, 1065, 1279, 1310, 1439, 1707, 1792.
- partial 48, 211, 240, 248, 316-22, 650, 718, 762, 913, 934, 1014-5, 1068, 1071, 1193, 1202, 1204, 1242, 1495, 1508, 1751, 1778.
- permutability 1347
- perspective,-ity 497, 870, 912, 950, 964.
- phase-space 140, 163, 210, 757, 821, 825, 827.
- philosophical,-y 170, 180, 183, 374, 529, 950, 1131, 1291, 1294, 1578-9, 1774,

- 1788.
- polarization 1778
- poset 48, 144, 149, 241, 246-7, 254, 273-4, 313, 450, 499, 502, 552-3, 601, 611, 646-7, 652, 665-6, 709, 715, 718, 779, 796, 869-70, 955, 998-9, 1046-8, 1054, 1055, 1057-8, 1067, 1134, 1141, 1205, 1270-1, 1365, 1368-9, 1451, 1485, 1595, 1598, 1602, 1606, 1624, 1636, 1765-7.
- possibility 163, 171, 371, 469, 947, 1304.
- pre-Hilbert 243, 247, 443.
- predicate 400
- probabilistic 57-8, 517, 1098, 1330, 1336, 1418, 1733, 1738.
- probability 24-5, 72, 123-5, 135, 169, 171, 177, 191, 199, 212, 215, 224, 228-9, 231-2, 328, 356, 405, 407, 480, 506-8, 511, 514, 526, 591, 698, 702, 708, 713, 726, 730, 740, 751, 753, 767, 769, 773, 775, 781, 783, 800, 820, 822, 824, 833, 838, 866, 868, 948, 984, 1017-8, 1022, 1045, 1063-4, 1145, 1185, 1197, 1223-4, 1294, 1304, 1335-6, 1349, 1358, 1371, 1382, 1395, 1401, 1426, 1437, 1446-7, 1517-8, 1523-4, 1542-3, 1545, 1569, 1572-4, 1576-7, 1585, 1620-1, 1625, 1683, 1690-91, 1717, 1727, 1734, 1737, 1760, 1786-7, 1794, 1799, 1806, 1812, 1816.
- projection,-ive 59, 169, 189, 265, 275, 277-8, 358, 468, 497, 499, 592, 673, 695, 714, 823, 845, 872, 884, 1003, 1059, 1119, 1189, 1198, 1209, 1218-9, 1223-5, 1396, 1400, 1448, 1572, 1575, 1606-8, 1749-50, 1771, 1824, 1830-1.
- projector 36-7, 1344, 1408.
- propensity 630
- property 23, 84, 110, 121, 218, 253, 269, 270, 346, 423, 428, 466, 630, 633-7, 642, 659, 690, 699, 814, 832, 893, 964, 1062, 1183, 1190, 1215, 1329, 1356, 1362-3, 1402, 1518, 1521, 1531, 1565, 1572, 1589, 1594, 1615, 1618, 1638, 1640, 1849.
- proposition 82, 85A, 244, 390, 600, 627, 710, 835, 897-8, 936, 947, 1071, 1200, 1296, 1403, 1565, 1647, 1682, 1696, 1761.
- proposition-state 118, 226, 657, 595.
- propositional system 26, 28, 31, 64, 405, 594, 670, 889-91, 902, 986, 1018, 1037, 1135, 1228, 1290, 1393-4, 1403, 1455, 1498, 1695.
- pure operations 473, 818, 887-8.
- pure states 706, 717, 1467, 1838.
- quantifier 379, 954, 957.
- quantization 66, 1036, 1436, 1673, 1754.
- quantum logic **contained in 277 titles**
- quantum set 532-5, 548, 741, 1753.
- quark 744, 745, 749, 754.
- quasi-implication 860-1.
- quasi-implicative 850.
- quasi-orthocomplement 273-4.
- quaternion 230, 543, 545, 991, 1325, 1352, 1777.
- Radon-Nikodym 736, 801, 911, 1362-3.
- random variable 509, 1020, 1372.
- realism 301, 376, 564, 598, 772, 875, 926, 932, 1705.
- relativistic 258, 758, 1109, 1244, 1305-6, 1308, 1310, 1319, 1385, 1571, 1699.
- representation 44, 48, 91, 130, 185, 258, 305-6, 377, 449-50, 554, 594, 611, 661, 714-5, 742, 787, 827, 843-4, 943-4, 996, 1004, 1046, 1068, 1073, 1075, 1083, 1141-2, 1145, 1189, 1205-6, 1377, 1467, 1471, 1506, 1511, 1524, 1530, 1684, 1720, 1765-7, 1790, 1835A.
- Riesz 299, 1203.
- ring 240, 267, 357, 415, 900, 917, 971, 975, 1013, 1209, 1211, 1216, 1225, 1324-5, 1342-3, 1448, 1803.
- Sasaki 499, 1846.
- Segal 365, 778, 1501, 1665.
- semantic 124, 197, 251, 321, 336, 399, 640, 653, 934, 1145, 1330, 1418, 1692, 1760, 1789, 1801.
- semi-Boolean 8, 971.

- semi-orthogonality 900
 semicomplemented 965
 semidistributivity 352
 semigroup 13, 15, 510, 557, 560-2, 742, 787, 808, 959-60, 998, 1103, 1460, 1835.
 semilattice 580, 972, 974, 998, 999, 1226, 1758.
 semimodular 869-70, 1461, 1771.
 semiorthocomplemented 1210, 1212
 separated,-tion,-bility 19, 255, 439, 633, 966, 1322, 1534.
 sesquilinear 1450-1.
 signed 424-5, 430, 433, 442, 461, 1102, 1414, 1612.
 simultaneous 363, 815, 1200, 1353, 1682, 1799.
 σ -convex 1625.
 σ -orthologic 989.
 space-time 66, 520-2, 525, 541, 1069, 1246-7, 1308, 1658, 1747.
 spectral,-um 3, 38, 40, 52, 235, 698, 1129, 1520, 1572, 1615, 1712.
 spin 540, 584, 936, 1435, 1445, 1744, 1825.
 state 1, 2, 6, 33, 39, 43, 53, 70, 83-4, 85A, 90, 92, 118, 126, 129, 200-2, 213-4, 216, 226, 275, 296, 308, 350, 362, 366-8, 380, 424-5, 443-5, 448, 452-3, 551, 595, 630, 648-9, 651, 657, 666-7, 676, 704, 706, 717, 721, 755, 761, 782, 804-5, 831-2, 844, 857, 930, 1056, 1061, 1084, 1086, 1096, 1121, 1140, 1171, 1204, 1230, 1259-60, 1265, 1273, 1283, 1352, 1354, 1356, 1360, 1367-8, 1370, 1383, 1396, 1399, 1400, 1414, 1464-5, 1467, 1470, 1480-2, 1484, 1486, 1491, 1506, 1519, 1525, 1509, 1540-1, 1559, 1611, 1619, 1643, 1650, 1654, 1712, 1728, 1740, 1775, 1824, 1826, 1838-9.
 statistical 6, 98-9, 373, 475, 501, 739, 813, 825, 831, 838, 866, 892, 930, 1268, 1423, 1586, 1729, 1739, 1798, 1838.
 stochastic 283, 411, 631, 734, 776, 825, 893, 929, 1061, 1424, 1527, 1566, 1646.
 Stone 654, 661, 940.
 sublattice 30, 314, 353, 671-2, 675, 916, 962.
 sublogic 54, 1671.
 subspace 148, 213, 243, 247, 252, 440, 443, 458, 644, 685, 840-1, 1050, 1290, 1514, 1850.
 subsystem 17, 29, 30.
 superposition 97, 118, 213, 216, 262, 366, 414, 712, 823, 1120, 1499, 1503, 1506, 1838-9.
 symmetry 215, 300, 328, 370, 486, 681, 722, 1016, 1083, 1207, 1213, 1261, 1500, 1645, 1775-6, 1842.
 symplectic 1453
 tensor product 23, 27, 572, 574, 580, 1066, 1137-9, 1254, 1515, 1563-4, 1822.
 three-valued 254, 894, 1828.
 topological,-y 528, 552, 628, 840-1, 943, 952, 1048, 1174, 1191, 1242, 1415, 1532, 1589-91, 1631, 1750.
 transformation 83, 423, 1466, 1714.
 transition 72, 212, 215, 730, 740, 764, 791, 820, 833, 1197, 1517-8, 1521, 1523-5, 1531.
 uncertainty 206, 217-8, 615, 728, 951, 1113, 1115, 1118, 1121, 1159, 1201, 1519, 1528.
 unsharp 642, 1316.
 valuation 272, 919, 1270.
 vector bundle 313
 vector space 17, 364, 686, 799, 1052, 1199, 1202, 1630.
 W^* -algebra 43, 479, 1059, 1830, 1831.
 weight 298, 570, 581, 613, 1066, 1139, 1612.
 yes-no 83, 134, 604, 815.
 zero-one 36-7, 1082, 1574.
 Zadeh 241, 246, 254, 639-40.