



# Curriculum Vitae

## HRZZ Form

### PERSONAL INFORMATION

Name and surname **Larisa Jonke**  
 Academic title Dr. sc.  
 Year and institution of PhD obtained 1999., University of Zagreb  
 Address Baradin prilaz 5, 10000 Zagreb  
 Phone +38514480221  
 Fax +38514680223  
 E-mail [Larisa@irb.hr](mailto:Larisa@irb.hr)  
 Personal web page <http://thphys.irb.hr/?show=people&id=jonkel>  
 Citizenship Croatian  
 Date and place of birth 27<sup>th</sup> October 1970

### WORK EXPERIENCE<sup>1</sup> (CHRONOLOGICALLY\*)

Date (from – until) 04/2010-  
 Institution Rudjer Boskovic Institute  
 Position Senior Scientific Associate  
 Work field Theoretical physics

### WORK EXPERIENCE<sup>2</sup> (CHRONOLOGICALLY\*)

Date (from – until) 11/2003 – 04/2010  
 Institution Rudjer Boskovic Institute  
 Position Scientific Associate  
 Work field Theoretical physics

### WORK EXPERIENCE<sup>3</sup> (CHRONOLOGICALLY\*)

Date (from – until) 04/1994 - 11/2003  
 Institution Rudjer Boskovic Institute  
 Position Research assistant  
 Work field Theoretical physics

### EDUCATION<sup>4</sup> (CHRONOLOGICALLY)

Date 12/1999 ; 03/1997 ; 03/1994  
 Place Zagreb  
 Institution University of Zagreb  
 Title of qualification awarded PhD.; Mr. Sc. ; B. Sc.

<sup>1,2,3</sup> Please add rows to enter all required information

\* all information in the document should be entered chronologically – from the most recent to the oldest

<sup>2,2,3</sup> Please add rows to enter all required information

\* all information in the document should be entered chronologically – from the most recent to the oldest

<sup>3,2,3</sup> Please add rows to enter all required information

\* all information in the document should be entered chronologically – from the most recent to the oldest

**TRAINING**  
(CHRONOLOGICALLY)

Year 2003  
 Place Munich, Germany  
 Institution Ludwig-Maximilians-Universität  
 Subject and skills covered postdoc

**LANGUAGES**

**MOTHER TONGUE** Croatian  
**ENGLISH LANGUAGE**  
 Speaking Very good  
 Writing good  
 Reading Very good

**OTHER FOREIGN LANGUAGES<sup>5</sup>**

Language German, Greek  
 Speaking Basic  
 Writing Basic  
 Reading Basic

**RESEARCH AND OTHER PROJECTS**

(CHRONOLOGICALLY; LEADER AND ASSOCIATES; FUNDING SOURCE)

09/2015 – 08/2019 - principal investigator of the project “Generalized Geometry and Symmetries” IP-2014-09-3258, HRZZ  
 01/2012 – 12/2013 – coordinator of the Croatian-Austrian bilateral project “Geometry and Quantum Fields from Noncommutative Landscape”, (coordinator on Austrian side dr. H. Steinacker), MZOS, OEAD  
 01/2009 – 12/2011 - principal investigator of the project “Matrix models, duality and field theory” No. 098-0982930-286, MZOS  
 01/2007- 12/2008 – collaborator on the project “Matrix models, duality and field theory” No. 098-0982930-286, (PI dr. I. Andrić), MZOS  
 12/2001 – 12/2006 – collaborator on the project “Quantum field theory, noncommutative spaces and symmetries” No. 0098003 (PI dr. S. Meljanac), MZOS  
 01/2006 – 12/2007 - collaborator on the Croatian-German bilateral project “Non-Abelian cohomologies and applications in geometry, algebra and physics “, (coordinators dr. Z. Škoda, prof. dr. C. Schweigert), MZOS, DAAD  
 1998-2000 – junior research project “Quantum dynamics of collective fluctuations around solitonic configurations in low-dimensional systems “, MZT  
 11/1996 – 12/2001 – collaborator on the project “Quantum field theory, statistics and symmetries” No. 00980103 (PI dr. S. Meljanac), MZT

**TEACHING**

(CHRONOLOGICALLY; UNDERGRADUATE, GRADUATE , POSTGRADUATE STUDY PROGRAMMES)

“Differential equations and dynamical systems”, undergraduate course, University of Zagreb (04/05, 07/08, 08/09, 09/10)

"Introduction to differential geometry", undergraduate course, University of Zagreb (07/08, 08/09, 09/10)

**VISITS TO FOREIGN RESEARCH AND EDUCATION INSTITUTIONS**

(CHRONOLOGICALLY; ONLY VISITS LONGER THAN 3 MONTHS)

10/2014 – 09/2015 - Institute for Theoretical Physics, Leibniz University Hannover, Germany  
 04/2012 – 07/2012 – A. von Humboldt scholarship, Physics Institute, University Bonn, Germany  
 01/2003 – 01/2004 - A. von Humboldt scholarship (postdoc) at the LMU, Munich, Germany

**AWARDS AND RECOGNITIONS**

(CHRONOLOGICALLY)

- Alexander for Humboldt fellowship (2003, 2012, 2015)
- RBI directors' award for distinguished publication 2011

**ORGANIZATIONAL SKILLS AND COMPETENCES**

(CHRONOLOGICALLY; ORGANIZATION OF HOME AND INTERNATIONAL SCIENCE EVENTS)

1. Workshop on “Recent Advances in T/U-dualities and Generalized Geometries”, 06/2017, Zagreb, Croatia; member of the organizing committee
2. “Quantum Structure of Spacetime and Gravity School”, 08/2016, Belgrade, Serbia; member of the local organizing committee
3. “2nd Mediterranean Conference on Classical and Quantum Gravity”, 06/2013, Veli Lošinj, Croatia; member of the organizing committee
4. “III Quantum Gravity and Quantum Geometry School”, 03/2011, Zakopane, Poland; member of the scientific committee
5. “II Quantum Gravity and Quantum Geometry School”, 09/2009, Corfu, Greece; member of the organizing committee
6. “II International School on Modern Trends in Mathematical Physics”, 09/2008, Varna, Bulgaria; member of the organizing committee
7. Workshop on “Black Holes in General Relativity and String Theory”, 08/2008, Veli Lošinj, Croatia; scientific secretary
8. 5th scientific meeting of Croatian Physical Society, 10/2007, Primosten, Croatia; member of the organizing committee
9. School on Particle Physics, Gravity and Cosmology, 10/2006, Dubrovnik, Croatia; scientific secretary
10. 9th Adriatic Meeting, 09/2003, Dubrovnik, Croatia; member of the organizing committee
11. 8th Adriatic Meeting, 09/2001; Dubrovnik, Croatia; member of the organizing committee

**MEMBERSHIP IN SCIENCE ORGANIZATIONS AND BODIES**

(CHRONOLOGICALLY; HOME AND INTERNATIONAL ORGANIZATIONS AND BODIES)

04/2015 – 04/2019 Member of the Management Committee of the COST action "Quantum structure of spacetime".

07/2007 – 12/2011 - Member of the Steering Committee of the Research Networking Programme of the European Science Foundation "Quantum Geometry and Quantum Gravity"

2006 – 2014 Member of the administrative board of the Humboldt-Club of Croatia

Member of the Croatian Physical Society

**COMMISSIONS, COMMITTEES, BOARDS AND WORK GROUPS**

(CHRONOLOGICALLY; HOME AND INTERNATIONAL)

Since 2010 - Evaluator for Croatian Science Foundation (HRZZ) and for Irish Research Council for Science, Engineering and Technology (IRCSET).

02/2008- 12/2008 Member of the committee for development strategy of the Rudjer Boskovic Institute

**PAPERS**

(CHRONOLOGICALLY; RESEARCH BOOKS, HOME AND INTERNATIONAL RESEARCH JOURNALS, HOME AND INTERNATIONAL CONFERENCE PROCEEDINGS)

**Research papers**

1. A. Chatzistavrakidis, A. Deser, L. Jonke, T. Strobl, „Strings in Singular Space-Times and their Universal Gauge Theory”, arXiv:1608.03250 [math-ph].
2. A. Chatzistavrakidis, A. Deser, L. Jonke, T. Strobl, „Beyond the standard gauging: gauge symmetries of Dirac Sigma Models”, J. High Energy Phys. 08 (2016) 172.
3. A. Chatzistavrakidis, A. Deser, L. Jonke, „T-duality without isometry via extended gauge symmetries of 2D sigma models”, J. High Energy Phys. 01 (2016) 154.
4. A. Chatzistavrakidis, L. Jonke, O. Lechtenfeld, „Sigma models for genuinely non-geometric backgrounds”, J. High Energy Phys. 11 (2015) 182.
5. I. Andrić, L. Jonke, D. Jurman, H.B. Nielsen, "Dynamical and Quenched Random Matrices and Homolumo Gap", arXiv:1408.3011.
6. M. Dimitrijević, L. Jonke, A. Pachoł, “Gauge Theory on Twisted  $\kappa$ -Minkowski: Old Problems and Possible Solutions”, SIGMA 10 (2014) 063.
7. A. Chatzistavrakidis, L. Jonke, and O. Lechtenfeld, “Dirac structures on nilmanifolds and coexistence of fluxes”, Nucl. Phys. B 883 (2014) 59.
8. A. Chatzistavrakidis, L. Jonke, “Matrix theory origins of non-geometric fluxes”, J. High Energy Phys. 02 (2013) 040
9. A. Chatzistavrakidis, L. Jonke, “Matrix theory compactifications on twisted tori”, Phys. Rev. D85 (2012) 106013.

10. M. Dimitrijević, L. Jonke, "A twisted look on kappa-Minkowski: U(1) gauge theory", J. High Energy Phys. 12 (2011) 080.
11. I. Andrić, L. Jonke, D. Jurman, H.B. Nielsen, "Homolumo gap from dynamical matrices", Phys. Rev. D (2009) 107701.
12. I. Andrić, L. Jonke, D. Jurman, H.B. Nielsen, "Homolumo gap and matrix model", Phys. Rev. D77 (2008) 127701.
13. I. Andrić, L. Jonke, D. Jurman, "Comment on 'Waves and solitons in the two-family Calogero model'", Phys. Rev. D77 (2008) 108701.
14. I. Andrić, L. Jonke, D. Jurman, "Solitons and giants in matrix models", J. High Energy Phys. 12 (2006) 006.
15. M. Dimitrijević, L. Jonke, L. Möller, "U(1) gauge field theory on kappa-Minkowski space", J. High Energy Phys. 09 (2005) 068.
16. I. Andrić, L. Jonke, D. Jurman, "Solitons and excitations in the duality-based matrix model", J. High Energy Phys. 08 (2005) 064.
17. I. Dadić, L. Jonke, S. Meljanac, "Harmonic oscillator on noncommutative spaces", Acta Phys. Slovaca 55 (2005) 1-16.
18. M. Dimitrijević, L. Jonke, L. Möller, E. Tsouchnika, J. Wess, M. Wohlgenannt, "Deformed Field Theory on kappa-spacetime", Eur. Phys. J. C31 (2003) 129-138.
19. L. Jonke, S. Meljanac, "Representations of noncommutative quantum mechanics and symmetries", Eur. Phys. J. C29 (2003) 433-439.
20. I. Dadić, L. Jonke, S. Meljanac "Harmonic oscillator with minimal length uncertainty relations and ladder operators", Phys. Rev. D 67 (2003) 087701.
21. L. Jonke, S. Meljanac, "Algebra of observables in the Calogero model and in the Chern-Simons matrix model", Phys. Rev. B 66 (2002) 205313.
22. V. Bardek, L. Jonke, S. Meljanac, M. Mileković, "Calogero model, deformed oscillators and the collapse", Phys. Lett. B 531 (2002) 311-315.
23. I. Andrić, L. Jonke, "Duality and quasiparticles in the Calogero-Sutherland model: Some exact results", Phys. Rev. A 65 (2002) 034707.
24. L. Jonke, S. Meljanac, "Finite Chern-Simons matrix model – algebraic approach", J. High Energy Phys. 01 (2002) 008.
25. L. Jonke, S. Meljanac, "Bosonic realization of algebras in the Calogero model", Phys. Lett. B526 (2002) 149.
26. L. Jonke, S. Meljanac, "Dynamical symmetry algebra of the Calogero model", Phys. Lett. B511 (2001) 276.
27. V. Bardek, L. Jonke and S. Meljanac, "Perturbative Spectrum of Trapped Weakly Interacting Bosons in Two Dimensions", Phys. Rev. A64 (2001) 015603.

28. I. Andrić, V. Bardek, L. Jonke, "Quantum fluctuations of the Chern-Simons theory and dynamical dimensional reduction", *Phys. Rev. D* 59 (1999) 107702.
29. I. Andrić, V. Bardek, L. Jonke, "Edge excitations and the contact term in anyonic systems", *Nuovo Cimento B* 113 (1998) 1253.
30. I. Andrić, V. Bardek, L. Jonke, "Multivortex solution in the Sutherland model", *J. Phys. A* 30 (1997) 717.
31. I. Andrić, V. Bardek, L. Jonke, "Solitons in the Calogero-Sutherland Collective-Field Model", *Phys. Lett. B* 357 (1995) 374.
32. I. Andrić, V. Bardek, L. Jonke, "Collective-field fluctuations around the wall solution of the Chern-Simons theory", *Fizika B* 7 (1998) 119.
33. I. Andrić, V. Bardek, L. Jonke, "Collective field excitations in the Calogero model", *Fizika B* 4 (1995) 93.

### Conference proceedings

1. L. Jonke, "Sigma models for genuinely non-geometric backgrounds", *Proc. of the Corfu Summer Institute 2015 "School and Workshops on Elementary Particle Physics and Gravity"*, 2015, Greece, PoS CORFU2015 (2016) 124.
2. A. Chatzistavrakidis, L. Jonke, "Generalized fluxes in matrix compactifications", *Proc. of the Corfu Summer Institute 2012 "School and Workshops on Elementary Particle Physics and Gravity"*, 2012, Greece, PoS Corfu2012 (2013) 095.
3. M. Dimitrijević, L. Jonke, " Twisted symmetry and noncommutative field theory", *Proc. of the SEENET-MTP Workshop JW2011: Scientific and Human Legacy of Julius Wess.*, Serbia, Eds: M. Dimitrijević, G. Djordjević, G. Fiore, P. Schupp; *Int. J. Mod. Phys. Conf. Ser.* 13 (2012) 54-65.
4. M. Dimitrijević, L. Jonke, " Gauge theory on kappa-Minkowski revisited: The Twist approach", *Proc. of the 7th Quantum theory and symmetries*, 2011, Prague, Eds: C. Burdik, O. Navratil, S. Posta, M. Schnabl, L. Snobl; *J.Phys.Conf.Ser.* 343 (2012) 012049.
5. I. Andrić, L. Jonke, D. Jurman, "Solitons and giants in matrix model", *Proc. of the III Southeastern European Workshop Challenges Beyond the Standard Model*, 2007, Serbia. Eds: M. Burić, G. Djordjević, M. Haack, D. Luest, G. Senjanović, *Fortschritte der Physik* 56 (2008) 324-329.
6. M. Dimitrijević, L. Jonke, L. Möller, "U(1) gauge field theory on kappa-Minkowski space", *Proc. of the XIV International Colloquium on Quantum Groups: Integrable Systems and Quantum Symmetries*, 2005, Prague, Eds: C. Burdik, O. Navratil, S. Posta; *Czech. J. Phys.* 55 (2005) 1391-1396.
7. I. Andrić, L. Jonke, D. Jurman, "Matrix-model dualities from conformal field theory", *Proc. of the QCD 2004*, Paris, Eds: B. Mueller, Chung-I Tan, *Int. J. Mod. Phys. A* 20 (2005) 4540-4545.

8. M. Dimitrijević, L. Jonke, L. Möller, E. Tsouchnika, J. Wess, M. Wohlgenannt, "Field theory on kappa-spacetime", Proc. of the XIII International Colloquium on Integrable Systems and Quantum Groups, 2004, Prague, Eds: C. Burdick, O. Navratil; Czech. J. Phys. 54 (2004) 1243-1248.
9. L. Jonke, S. Meljanac, "Finite Chern-Simons matrix model - algebraic approach", Particle Physics in the New Millennium - Proc. of the 8th Adriatic Meeting (Lecture Notes in Physics), Eds: J. Trampetić, J. Wess, Springer-Verlag, 2003, (CD).
10. I. Andrić, V. Bardek, L. Jonke, "Quantum fluctuations of the Chern-Simons theory and the Calogero model", Topology of Strongly Correlated Systems, Proceedings of the XVIII Lisbon Autumn School, Eds: P. Bieudo, J. E. Ribeiro, P. Sacramento, J. Seixas, V. Vieira, World Scientific 2001, p.232-235.
11. I. Andrić, L. Jonke, "Duality and Coherent States in the Calogero Model", Nonperturbative QFT methods and their applications, Proceedings of the 24th Johns Hopkins Workshop, Eds: Z Horváth, L Palla, World Scientific 2001, p.445-450.
12. I. Andrić, L. Jonke, "Duality and SU(1,1) coherent states in the Calogero-Moser Model", Quantum Chromodynamics, Proceedings of the Fifth Workshop, Eds: H. M. Fried, B. Mueller, Y. Gabellini, World Scientific 2000, p.263-268.
13. I. Andrić, V. Bardek, L. Jonke, "Dimensional Reduction of the Chern-Simons Theory in Large-N Limit", Proceedings of the IV Workshop on QCD, Paris 1998, Eds: H. M. Fried and B. Mueller, World Scientific 1999, p. 326-331.
14. I. Andrić, V. Bardek, L. Jonke, "Solitons in the Calogero-Sutherland Collective-Field Model", Proceedings of the Schladming School 1995 (Lecture Notes in Physics 469), Eds: H. Grosse and L. Pittner, Springer-Verlag 1996, p. 245-248.

#### OTHER RESEARCH ACTIVITIES

(CHRONOLOGICALLY; CHIEF EDITOR OR EDITOR OF RESEARCH BOOK, HOME AND INTERNATIONAL RESEARCH JOURNALS, HOME AND INTERNATIONAL CONFERENCE PROCEEDINGS AND OTHER)

Editor of „The proceedings of the 3rd Quantum Gravity and Quantum Geometry School, Zakopane 2011“, Proceedings of Science, <http://pos.sissa.it/cgi-bin/reader/conf.cgi?confid=140> .

Guest editor of „The proceedings of the 2nd School on Quantum Gravity and Quantum Geometry session of the 9th Hellenic School on Elementary Particle Physics and Gravity, Corfu 2009“, Gen. Relativ. Gravit. 43 (2011) 2331.

Refereeing for the following journals: Nucl. Phys. B, Class. Quantum Grav., Phys. Lett. B, J. Phys. A: Mathematical and General, J. Phys. G: Condensed Matter, Fizika