

Curriculum Vitae

HRZZ Form



PERSONAL INFORMATION

Name and surname **Tihomir Surić**
 Academic title dr. sc.
 Year and institution of PhD obtained 1991, University of Zagreb, Physics Department,
 Faculty of Science
 Address R. Bošković Institute, Bijenička 54 , 10000 Zagreb, Croatia
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 E-mail suric@irb.hr
 Personal web page
 Citizenship Croatian
 Date and place of birth 29 July 1957, Zadar, Croatia

WORK EXPERIENCE¹ (CHRONOLOGICALLY*)

Date (from – until) 1983 - present
 Institution Rudjer Boskovic Institute, Bijenicka 54, 10000 Zagreb, Croatia
 Position Senior Scientific Associate (2004-present),
 Scientific Associate (1997-2004),
 Senior Research Assistant (1991-1997),
 Research Assistant (1987-1991),
 Assistant (1982-1987)
 Work field Science, Physics

EDUCATION² (CHRONOLOGICALLY)

Date 1987-1991
 Place Zagreb, Croatia
 Institution University of Zagreb, Faculty of science, Physics department
 Title of qualification awarded Ph.D. in Theoretical physics

Date 1982-1987
 Place Zagreb, Croatia
 Institution University of Zagreb, Faculty of science, Physics department
 Title of qualification awarded M.Sc., Theoretical physics

Date 1982
 Place Zagreb, Croatia
 Institution University of Zagreb, Faculty of Science, Physics department
 Title of qualification awarded dipl. Ing., Physics

^{1, 2, 3} Please add rows to enter all required information

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

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TRAINING

(CHRONOLOGICALLY)

Year	2009 (3 weeks)
Place	La Palma, Spain
Institution	MAGIC telescope, ORM observatory
Subject and skills covered	Commissioning work for the MAGIC II Cherenkov telescope and observing training with MAGIC I telescope
Year	1987-2009 (at least a month per year; 6 months in 1988, 3 months in 1989, 45 months in total)
Place	Pittsburgh , PA, USA
Institution	Department of Physics and Astronomy, University of Pittsburgh
Subject and skills covered	Theoretical atomic physics, Scientific research

LANGUAGES

MOTHER TONGUE	Croatian
ENGLISH LANGUAGE	
Speaking	proficient
Writing	proficient
Reading	proficient

OTHER FOREIGN LANGUAGES³

Language
Speaking
Writing
Reading

RESEARCH AND OTHER PROJECTS

(CHRONOLOGICALLY; LEADER AND ASSOCIATES; FUNDING SOURCE)

2008-	"Major Atmospheric Gamma-ray Imaging Cherenkov (MAGIC) Telescope", International collaboration
2007-	"Photon-atom interaction and correlations", Project leader, Croatian Ministry of Science
2004-2007	"Stored Particles Atomic Physics Research Collaboration" (SPARC international collaboration)
2002-2006	"Photon-atom interaction and correlations", Project leader, Croatian Ministry of Science
1996-2001	"Photon-atom scattering", associate (Project Leader dr. Krunoslav Pisk), Croatian Ministry of Science
1987-1990	"Photon-atom interaction", associate (Project Leader dr. Krunoslav Pisk), US NSF project

TEACHING

(CHRONOLOGICALLY; UNDERGRADUATE, GRADUATE , POSTGRADUATE STUDY PROGRAMMES)

2004-2005	University of Rijeka, Croatia, School of Medicine, First year undergraduate course "Fizika i elektronika"
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MENTORSHIP OF DEFENDED DOCTORAL AND MASTER DISSERTATIONS**AND TRAINING OF YOUNG RESEARCHERS AND SCIENTISTS**

(CHRONOLOGICALLY)

- 1) Iva Perković,
"Utjecaj promjenljive atmosferske transparentnosti na opažanja Čerenkovljevih teleskopima", University of Zagreb, Faculty of Science, diploma thesis, 2009.
- 2) Nikola Strah,
"Dizajn Čerenkovljevog opservatorija pomoću Monte Carlo simulacija", University of Zagreb, Faculty of Science, diploma thesis, 2009.

VISITS TO FOREIGN RESEARCH AND EDUCATION INSTITUTIONS

(CHRONOLOGICALLY; ONLY VISITS LONGER THAN 3 MONTHS)

45 months at the Department of Physics and Astronomy, University of Pittsburgh, Pittsburgh, PA, USA, multiple visits

AWARDS AND RECOGNITIONS

(CHRONOLOGICALLY)

ORGANIZATIONAL SKILLS AND COMPETENCES

(CHRONOLOGICALLY; ORGANIZATION OF HOME AND INTERNATIONAL SCIENCE EVENTS)

- 2004-present Member of the Organizing Committee of "Open days of the R. Bošković Institute"
 2005 Member of the Organizing Committee of the Croatian Physical Society for the international "Year of Physics", coordinator of the project "Physics experiments in public"

MEMBERSHIP IN SCIENCE ORGANIZATIONS AND BODIES

(CHRONOLOGICALLY; HOME AND INTERNATIONAL ORGANIZATIONS AND BODIES)

Croatian astronomical society (HAD)
 Croatian physical society (HFD)
 MAGIC collaboration
 CTA collaboration

COMMISSIONS, COMMITTEES, BOARDS AND WORK GROUPS

(CHRONOLOGICALLY; HOME AND INTERNATIONAL)

- 2008- Member of the Governing Board of ASPERA (<http://www.aspera-eu.org/>)
 2008-2010 Member of the Joint Secretariat of ASPERA (representing Croatian Science Foundation)
 2004-2006 Member of the Collaboration Board of the SPARC (Stored Particles Atomic Physics Research Collaboration)
 1996-2002 Member of the International Scientific Committee of the International X-ray and Inner--Shell Conference Series

PAPERS

(CHRONOLOGICALLY; RESEARCH BOOKS, HOME AND INTERNATIONAL RESEARCH JOURNALS, HOME AND INTERNATIONAL CONFERENCE PROCEEDINGS; PLEASE WRITE THEIR IMPACT FACTOR)

1. Abdo, A. A.; ...; Dominis Prester, Dijana; ...; Ferenc, Daniel; ...; Godinović, Nikola; ...; Hrupec, Dario; ...; Puljak, Ivica; ...; Surić, Tihomir; ...; Terzić, Tomislav; ... (Fermi-LAT collaboration, MAGIC collaboration, VERITAS collaboration, GASP-WEBT consortium).
[Insights into the High-energy \$\gamma\$ -ray Emission of Markarian 501 from Extensive Multifrequency Observations in the Fermi Era](#). // *The Astrophysical journal*. **727** (2011) , 129; 1-25, **IF = 6.331**
2. Aleksić, Jelena; ...; Dominis Prester, Dijana; ...; Ferenc, Daniel; ...; Godinović, Nikola; ...; Hrupec, Dario; ...; Lelas, Damir; ...; Puljak, Ivica; ...; Surić, Tihomir; ...; Terzić, Tomislav.
[MAGIC observations and multiwavelength properties of the quasar 3C279 in 2007 and 2009](#). // *Astronomy and astrophysics*. **530** (2011) , A4; 1-11, **IF = 4.153**
3. Aleksić, Jelena; ...; Dominis Prester, Dijana; ...; Ferenc, Daniel; ...; Godinović, Nikola; ...; Hrupec, Dario; ...; Lelas, Damir; ...; Puljak, Ivica; ...; Surić, Tihomir; ...; Terzić, Tomislav.
[MAGIC discovery of VHE Emission from the FSRQ PKS 1222+21](#). // *The Astrophysical journal*. **730** (2011) , L8; 1-6 , **IF = 6.331**
4. Aleksić, Jelena; ...; Dominis Prester, Dijana; ...; Ferenc, Daniel; ...; Godinović, Nikola; ...; Hrupec, Dario; ...; Lelas, Damir; ...; Puljak, Ivica; ...; Surić, Tihomir; ...; Terzić, Tomislav.
[Searches for Dark Matter annihilation signatures in the Segue 1 satellite galaxy with the MAGIC-I telescope](#). // *Journal of cosmology and astroparticle physics*. **06** (2011) , 035; 1-24, **IF = 6.497**
5. Aleksić, Jelena; ...; Dominis Prester, Dijana; ...; Ferenc, Daniel; ...; Godinović, Nikola; ...; Hrupec, Dario; ...; Lelas, Damir; ...; Puljak, Ivica; ...; Surić, Tihomir; ...; Terzić, Tomislav.
[A search for Very High Energy gamma-ray emission from Sco X-1 with the MAGIC telescopes](#). // *The Astrophysical journal*. **735** (2011) , L5; 1-5, **IF = 6.331**
6. Aleksić, Jelena; ...; Dominis Prester, Dijana; ...; Ferenc, Daniel; ...; Godinović, Nikola; ...; Hrupec, Dario; ...; Puljak, Ivica; ...; Surić, Tihomir; ...; Terzić, Tomislav.
[Gamma-ray Excess from a Stacked Sample of High- and Intermediate-Frequency Peaked Blazars](#)

[Observed with the MAGIC Telescope.](#) // *The Astrophysical journal*. **729** (2011) , 115; 1-14, **IF = 6.331**

7. Aleksić, Jelena; ...; Dominis Prester, Dijana; ...; Ferenc, Daniel; ...; Godinović, Nikola; ...; Hrupec, Dario; ...; Puljak, Ivica; ...; Surić, Tihomir; ...; Terzić, Tomislav.

[Observations of the Blazar 3C 66A with the MAGIC Telescopes in Stereoscopic Mode.](#) // *The Astrophysical journal*. **726** (2011) , 58; 1-10, **IF = 6.331**

8. Acciari, V. A.; ...; Dominis Prester, Dijana; ...; Ferenc, Daniel; ...; Godinović, Nikola; ...; Hrupec, Dario; ...; Puljak, Ivica; ...; Surić, Tihomir; ...; Terzić, Tomislav; ... (VERITAS collaboration, MAGIC collaboration).

[Spectral Energy Distribution of Markarian 501: Quiescent State vs. Extreme Outburst.](#) // *The Astrophysical journal*. **729** (2010) , 2; 1-25, **IF = 6.331**

9. Aleksić, J.; ...; Dominis Prester, Dijana; ...; Ferenc, Daniel; ...; Godinović, Nikola; ...; Hrupec, Dario; ...; Puljak, Ivica; ...; Surić, Tihomir.

[Simultaneous multi-frequency observation of the unknown redshift blazar PG 1553+113 in March-April 2008.](#) // *Astronomy and astrophysics*. **515** (2010) , A76; 1-5, **IF = 4.153**

10. Aleksić, J.; ...; Dominis Prester, Dijana; ...; Ferenc, Daniel; ...; Godinović, Nikola; ...; Hrupec, Dario; ...; Puljak, Ivica; ...; Surić, Tihomir.

[MAGIC TeV Gamma-Ray Observations of Markarian 421 during Multiwavelength Campaigns in 2006.](#) // *Astronomy and astrophysics*. **519** (2010) , A32; 1-10, **IF = 4.153**

11. Aleksić, J.; ...; Dominis Prester, Dijana; ...; Ferenc, Daniel; ...; Godinović, Nikola; ...; Hrupec, Dario; ...; Puljak, Ivica; ...; Surić, Tihomir.

[MAGIC observation of the GRB 080430 afterglow.](#) // *Astronomy and astrophysics*. **517** (2010) , A5; 1-6, **IF = 4.153**

12. Aleksić, Jelena; ...; Dominis Prester, Dijana; ...; Ferenc, Daniel; ...; Godinović, Nikola; ...; Hrupec, Dario; ...; Puljak, Ivica; ...; Surić, Tihomir; ...; Terzić, Tomislav.

[MAGIC Gamma-Ray Observation of the Perseus Galaxy Cluster.](#) // *The Astrophysical journal*. **710** (2010) ; 634-647, **IF = 6.331**

13. Aleksić, Jelena; ...; Dominis Prester, Dijana; ...; Ferenc, Daniel; ...; Godinović, Nikola; ...; Hrupec, Dario; ...; Puljak, Ivica; ...; Surić, Tihomir; ...; Terzić, Tomislav.

[Search for an extended VHE gamma-ray emission from Mrk 421 and Mrk 501 with the MAGIC Telescope.](#) // *Astronomy and astrophysics*. **524** (2010) , A77; 1-8, **IF = 4.153**

14. Aleksić, Jelena; ...; Dominis Prester, Dijana; ...; Ferenc, Daniel; ...; Godinović, Nikola; ...; Hrupec, Dario; ...; Puljak, Ivica; ...; Surić, Tihomir; ...; Terzić, Tomislav.

[Magic constraints on Gamma-ray emission from Cygnus X-3.](#) // *The Astrophysical journal*. **721** (2010) , 1; 843-855, **IF = 6.331**

15. Aleksić, Jelena; ...; Dominis Prester, Dijana; ...; Ferenc, Daniel; ...; Godinović, Nikola; ...; Hrupec, Dario; ...; Puljak, Ivica; ...; Surić, Tihomir; ...; Terzić, Tomislav.

[MAGIC Upper Limits for two Milagro-detected, Bright Fermi Sources in the Region of SNR G65.1+0.6.](#) // *The Astrophysical journal*. **725** (2010) ; 1629-1632, **IF = 6.331**

16. Aleksić, Jelena; ...; Dominis Prester, Dijana; ...; Ferenc, Daniel; ...; Godinović, Nikola; ...; Hrupec, Dario; ...; Puljak, Ivica; ...; Surić, Tihomir; ...; Terzić, Tomislav.

[Detection of very high energy gamma-ray emission from the Perseus cluster head-tail galaxy IC 310 by the MAGIC telescopes.](#) // *The Astrophysical journal*. **723** (2010) ; L207-L212, **IF = 6.331**

17. H. Anderhub, H.; ...; Dominis Prester, Dijana; ...; Ferenc, Daniel; ...; Godinović, Nikola; ...; Hrupec, Dario; ...; Puljak, Ivica; ...; Surić, Tihomir.

[Search for Very High-Energy Gamma-Ray Emission from Pulsar-PWN Systems with the MAGIC Telescope.](#) // *The Astrophysical journal*. **710** (2010) ; 828-835, **IF = 6.331**

18. R.H. Pratt, L.A. Lajohn, V. Florescu, T. Surić, B. K. Chatterjee and S.C. Roy, [Compton scattering revisited.](#) // *Radiat Phys Chem* **79**, (2010) 124-131, **IF=0.882**

19. Anderhub, H.; ...; Dominis Prester, Dijana; ...; Godinović, Nikola; ...; Ferenc, Daniel; ...; Hrupec, Dario; ...; Puljak, Ivica; ...; Surić, Tihomir.

[Discovery of Very High Energy gamma-rays from the blazar S5 0716+714.](#) // *Astrophysical Journal Supplement Series*. **704** (2009) , 2; L129-L133, **IF = 6.331**

20. Anderhub, H.; ...; Dominis Prester, Dijana; ...; Godinović, Nikola; ...; Ferenc, Daniel; ...; Hrupec, Dario; ...; Puljak, Ivica; ...; Surić, Tihomir.

[Correlated X-ray and very high energy emission in the gamma-ray binary LS I +61 303.](#) // *The Astrophysical journal. Supplement series*. **706** (2009) , 1; L27-L32, **IF = 6.331**

21. Z. Kaliman, K. Pisk and T. Surić, [Angular correlations in double ionization of Helium by high-energy Compton scattering.](#) // *Nucl. Instr. Methods*. **A 580**, (2007) 43-45 . **IF= 1.397**

22. R.H. Pratt, L.A. Lajohn, T. Surić, B. K. Chatterjee and S.C. Roy, [Limitations on the validity of impulse approximation in Compton scattering](#) // *Nucl. Instr. Methods*. **B 261** (2007) 175-179

IF=0.999

23. B. K. Chatterjee, S. C. Roy, T. Surić, L. A. LaJohn and R. H. Pratt, [Asymmetry and the shift of the Compton profile](#) // Nucl. Instr. Meth. **A 580**, 22-24 (2007). **IF= 1.397**
24. T. Surić and R. H. Pratt, Comment on: [Photoionization of helium-like ions in asymptotic non-relativistic region](#) [Phys. Lett. A **358** (2006) 211]// Phys. Lett. **A 367** (2007) 254-256, **IF= 2.174**
25. Z. Kaliman, K. Pisk, T. Surić, [Perturbative calculation of the cross section in double ionization by high-energy Compton scattering](#) // Eur. Phys. J. **D 42** (2007) 369-372. **IF= 1.397**
26. T. Surić, [Compton scattering beyond impulse approximation: Correlation, nonlocal--exchange and dynamic effects](#) // Radiat Phys Chem **75** (2006) 1646-1650. **IF= 0.882**
27. T. Surić and R. H. Pratt, [O\(1/omega\) corrections to the shake-off \(shake-up\) correlation effects in double \(single\) ionization of He by absorption of a photon](#) // J Phys **B 37** (2004) L93-L102. **IF= 2.089**
28. T. Surić, [High Energy Photoeffect](#) // Radiat Phys Chem, **70** (2004) 253-265. **IF= 0.882**
29. T. Surić, E. G. Drukarev, R. H. Pratt, [Characterization of high-energy photoionization in terms of the singularities of the atomic potential. II. Beyond K-shell ionization in a many-electron atom, using the example of a two-electron atom in an excited state](#)// Phys. Rev. **A 66**, 022710 (2003). **IF= 2.908**
30. T. Surić, E. G. Drukarev, R. H. Pratt, [Characterization of high-energy photoionization in terms of the singularities of the atomic potential. I. Photoionization of the ground state of a two-electron atom](#) // Phys. Rev. **A 66**, 022709 (2003). **IF= 2.908**
31. T. Surić, E. G. Drukarev, R. H. Pratt, [Understanding atomic processes in terms of Coulombic singularities](#) // J Exp Theor Phys **97**(2003) 217-231. **IF= 0.892**
32. T. Surić, R. H. Pratt, [Ionization of an atom by photoabsorption at high photon energies: unified view in terms of singularities of the Coulombic potentials](#) // Radiat Phys Chem **61** (2001) 399-400. **IF= 0.882**
33. R. H. Pratt, T. Surić, [The approach to asymptotic behavior in photoionization](#) // J Chinese Chem Soc-Taipei, **48** (2001) 399-409. **IF= 0.770**
34. Z. Kaliman, T. Surić, K. Pisk, and R. H. Pratt, *Fizika A (Zagreb)* **9** (2000) 1-8.
35. Z. Kaliman, T. Surić, K. Pisk, and R. H. Pratt, [Triply differential cross section for Compton scattering](#), Phys. Rev. **A 57** (1998) 2683. **IF= 2.908**
36. R. H. Pratt, T. Surić and K. Pisk, [The persistent correlation effects in double ionization of helium like atoms or ions which are probed with high energy photons](#) // Journal of the Korean Physical Society **32** (1998) 356-364. **IF= 0.828**
37. T. Surić, [A simple procedure for the calculation of the shake--off ratio of double--to--single ionization of helium--like ion by photoabsorption of a high--energy photon](#) // Indian Journal of Physics, **71 B** (1997) 415. **IF= 0.175**
38. T. Surić, K. Pisk, R. H. Pratt, [Charge dependence of the ratio of double to total ionization of a helium--like ion by Compton scattering of a high energy photon](#) // Phys. Lett. **A 211** (1996) 289. **IF= 2.174**
39. T. Surić, K. Pisk, B. A. Logan, R. H. Pratt, [Ionization of Two--Electron Systems by Compton scattering of a Photon](#) // Phys. Rev. Lett. **73** (1994) 790. **IF= 7.180**
40. T. Surić, R. Horvat, and K. Pisk, [Internal bremsstrahlung: Exact relativistic independent-particle approximation calculations](#) // Phys. Rev. **C 47** (1993) 47. **IF= 3.124**
41. P. M. Bergstrom, Jr., T. Surić, K. Pisk and R. H. Pratt, [Compton scattering of photons from bound electrons: full relativistic IPA calculations](#) // Phys. Rev. **A 48** (1993) 1134. **IF=2.908**
42. P. M. Bergstrom, Jr., T. Surić, K. Pisk and R. H. Pratt, [Some preliminary calculations of whole atom Compton scattering of unpolarized photons](#) // Nucl. Instr. Meth. **B 71** (1992) 1. **IF= 0.999**
43. T. Surić, [Compton scattering from bound electrons: comparisons of the impulse approximation with exact IPA calculation](#) // Nucl. Instr. Meth. **A 314** (1992) 240. **IF= 1.397**
44. T. Surić, P. M. Bergstrom, Jr., K. Pisk and R. H. Pratt, [Compton scattering of photons by inner shell electrons](#) // Phys. Rev. Lett. **67** (1991) 189. **IF= 7.180**
45. K. Pisk and T. Surić, [On the modification of the lattice action](#) // J. Phys. **A 20** (1987) 5089. **IF= 1.540**

Conference Proceedings:

1. R. H. Pratt, E. G. Drukarev, and T. Surić, [High energy limit of photon-atom interactions: example of double ionization of He by photoabsorption](#) in *Frontiers of Physics 1998*, edited by S. P. Chia and D. A. Bradley, World Scientific (Singapore) 2000, 125-132.

2. T. Surić, K. Pisk, R. H. Pratt, [Double ionization of a helium--like atom or ion by a high energy photon](#), *Proceedings of the 17th International Conference on X--ray and Inner--shell processes, Hamburg, Germany 1996*, edited by R. L. Johnson, H. Schmidt-Boecking and B. F. Sonntag, (AIP Conference Proceedings 389, Woodbury, New York, 1997), p 465-474.

3. R. H. Pratt, Lynn Kissel, B. Zhou, P. M. Bergstrom, Jr., K. Pisk and T. Surić, [Scattering of Photons From Atomic Electrons](#) in *Radiative Properties of Hot Dense Matter, Proceedings of the 4th International Workshop October 22-24, 1990 Sarasota, Florida*, edited by W. Goldstein, C. Hooper, J. Gauthier, R. Seely, and R. Lee, (World Scientific, Singapore 1991). p 263-272.

COMPUTER SKILLS

Programming: Fortran, C

OS: Linux, MS Windows

Applications: LaTeX, Office

OTHER IMPORTANT SKILLS AND COMPETENCES

Team work ability, good communication skills

ADDITIONAL INFORMATION AND NOTES