

Curriculum Vitae

Name: **Zurab Ratiani**

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Education:

- 2005-2010 **New York University**, USA.
Thesis: Nonequilibrium dynamics in impurity models and one-dimensional systems.
Ph.D. advisor: Prof. Aditi Mitra.
- 2002-2003 **University of Hamburg**, Germany. Programming, data analysis.
- 1999-2002 **University of Hannover**, Germany.
Diploma (equivalent to a M.Sc. degree in Physics) July 2002.
Thesis: The conformally invariant vector field on $R \times S^3$.
- 1993-1998 **Tbilisi State University**, Georgia.
Bachelor's Diploma in Physics (with Honors), June 1997.

Work experience:

- 2019-present Assistant professor at the School of Business, Technology and Education of **Ilia State University**.
(Courses in electronic and electrical engineering program: Electrical Network Analysis I, Electrical Network Analysis II, Electronic Materials and Devices, Solid State Devices.
Courses in New Materials for Nanoelectronics and Nanoengineering
Master's program:
Solid state physics I, Solid state physics II, Photonics.)
Advisor of master's thesis: model of Solar Cell Panel.
- 2014-2019 Lecturer at the Engineering Department of Free University of Tbilisi.
(Semiconductor devices, Solid state physics, Computer modeling).
- 2018-2019 Lecturer at the Business Department of Caucasus International University. (Statistics at Economics and Business).
- 2018-2019 Physicist at Radiation Therapy Centre.

2015-2018 Physics Teacher in QSI-Tbilisi International School.
2013-2014 Guest Scientist at **Kyoto Institute of Technology**, Japan.
Simulation of nano-systems using Mathematica.
2012-2013 Specialist at the Department of Scientific Research (TSU, Georgia).
2010-2012 Postdoctoral Fellow at ICTP(International Centre for
Theoretical Physics), Italy.
2005-2010 Teaching and Research Assistant (NYU).
2000-2002 Scientific assistant (University of Hannover).

Languages: Georgian(mother tongue), English(fluent)
German(fluent), Russian(fluent).

Programming skills: Mathematica, C, C++, Matlab, Maple,
SQL, Python.

Participation in Schools and Conferences:

2012 Summer School on Quantum Many-Body Physics of Ultra-Cold Atoms
and Molecules, ICTP.
2011 School on Topological Aspects of Condensed Matter Physics 2011, ICTP.
2009 Summer School on Condensed Matter Physics 2009, Princeton University.
2002 Summer school, Saalburg (Germany).
2002 Workshop on Physics beyond the standard model, Bad-Honnef (Germany).

Talks and Posters:

- 2010 APS March Meeting 2010, Portland,
talk: "Nonequilibrium dynamics in a two-channel Kondo system due to a quantum quench".
- 2009 APS March Meeting 2009, Pittsburgh,
talk: "1/N expansion of the nonequilibrium single-impurity Anderson model".
- 2009 Gotham-Metro Condensed Matter Meeting, New York,
poster: "Nonequilibrium dynamics in a two-channel Kondo system due to a quantum quench".

List of Publications:

1. Z.Ratiani, A.Mitra, Nonequilibrium dynamics in a two-channel Kondo system due to a quantum quench,
Phys. Rev. B **81**, 125110 (2010); arXiv:cond-mat/0908.4058.
2. Z.Ratiani, A.Mitra, 1/N expansion of the nonequilibrium infinite-U Anderson model,
Phys. Rev. B (Editors' suggestion) **79**, 245111 (2009); arXiv:cond-mat/0902.1263.
3. Evidence for a narrow anti-charmed baryon state,
with the H1 Collaboration (A.Atkas et al.),
Phys. Lett. **B588**: 17, 2004.
4. Search for squark production in R parity violating supersymmetry at HERA,
with the H1 Collaboration (A.Atkas et al.),
Eur. Phys. J. **C36**: 425-440, 2004.
5. Measurement of anti-deuteron photoproduction and a search for heavy stable charged particles at HERA,
with the H1 Collaboration (A.Atkas et al.),
Eur. Phys. J. **C36**: 413-423, 2004.
6. Measurement of the proton structure function $F(2)$ at low Q^2 in QED Compton scattering at HERA,
with the H1 Collaboration (A.Atkas et al.),
Phys. Lett. **B598**: 159-171, 2004 .
7. Measurement of prompt photon cross sections in photoproduction at HERA,
with the H1 Collaboration (A.Atkas et al.),
Eur. Phys. J. **C38**: 437-445, 2005.
8. Inclusive production of D^+ , D^0 , $D^+(s)$ and D^{*+} mesons in deep inelastic scattering at HERA,
with the H1 Collaboration (A.Atkas et al.),
Eur. Phys. J. **C38**: 447-459, 2005.