

Name: Mikhail Baranov

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Present Position:

Senior Researcher
Institut für Quantenoptik und Quanteninformation
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Österreich

Personal Information:

Place of Birth: Shelkovo Moscow Region, Russia
Date of Birth : 21.03.61
Married, two sons and one daughter

Education:

- Physical Education at the Moscow Institute of Engineering and Physics (MIEP), Moscow, 1978–84.
- M.Sc. in Theoretical Nuclear Physics, Department of Theoretical Physics, MIEP, February 1984.
M.Sc. Thema: *Supercharacteristic Classes of Supergauge Fields*, MIEP, 1984.
- Ph.D. in Physics and Mathematics, Department of Theoretical Physics, MIEP, June 1987. Ph.D. Thema: *Geometrical Aspects of Supergravity and String Theory*, Supervisor: Prof. Dr. A.S. Schwarz.

Teaching Experience:

- Tutor: Department of Theoretical Physics, MIEP (1985 – 1987)
Exercises for Students in Theoretical Physics (Mechanics, Electrodynamics, Quantum Mechanics, Statistical Physics).
- Tutor: Department of General Physics, MIEP (1987 – 1990)
Exercises for Students in Mechanics, Electrodynamics, Quantum Mechanics, Statistical Physics.
- Lecturer: Institute for Theoretical Physics, University of Amsterdam, 1994
Lecture course "Theoretical Methods for Many-Body Systems".
- Lecturer: Institute for Theoretical Physics, University of Hannover, 2000
Lecture course "Introduction to Physics of Ultracold Gases".
- Lecturer: Institute for Theoretical Physics, University of Hannover, 2002
Lecture course "Green Functions Method for Condensed Matter Problems".

- Lecturer: University of Barcelona, 2002
Lecture course "Introduction to the physics of ultracold Fermi gases".
- Lecturer: University of Hannover, 2003/2004
Lecture course "Quantum mechanics".
- Lecturer: University of Innsbruck, 2004
Lecture course: "Microscopic theory of pairing in fermionic systems".
- Lecturer: Les Houches Predoc Summer School, 2006
Lecture course: "Superfluidity in Fermi and Bose systems".
- Lecturer: University of Amsterdam, 2007
Lecture course: "Superfluidity and superconductivity in Bose and Fermi systems".

Professional Career:

- 1987-1992 Research Scientist, Moscow Institute of Engineering and Physics, Moscow, Russia.
- 1992-1996 Research Scientist, General Physics Institute of Russian Academy of Sciences, Moscow, Russia.
- 1996-2004 Senior Scientist, Laboratory for Mathematical Problems in Physics, Russian Research Center "Kurchatov Institute", Moscow, Russia.
- 2004-2007 Senior Researcher, Van der Waals - Zeeman Institute, University of Amsterdam, Amsterdam, the Netherlands.
- 2007-now Senior Researcher, Institut für Quantenoptik und Quanteninformation, Österreichische Akademie der Wissenschaften, Innsbruck, Austria.

Research Visits:

- 1992-2002 regular visits as visiting research associate, Institute for Theoretical Physics, University of Amsterdam, The Netherlands; FOM Institute AMOLF, Amsterdam, the Netherlands.
- 1992 visiting research associate, Chalmers University, Göteborg, Sweden
- 1996 visiting research associate, Leiden University, The Netherlands
- 1996 visiting research associate, Weizmann Institute of Physics, Rehovot, Israel
- 1999 visiting research associate, Ecole Normale Supérieure, Paris, France
- 2000 visiting research associate, Institut für Theoretische Physik, Universität Hannover, Germany
- 2001-2004 visiting research associate, Institute für Theoretische Physik, Universität Hannover, Germany
- 2004 Gast-Dozent, Universität Innsbruck, Österreich
- 2005 Aspen Center for Physics, Aspen, USA
- 2006 Institut de Ciències Fotòniques (ICFO), Barcelona, Spain

Research Areas:

- Condensed Matter Physics

- Ultra-cold quantum Gases

Research Interests:

In the present moment my scientific interests are related to studies of many-body effects in ultracold atomic and molecular gases.

Conferences (with talks):

- 1997 International ESF Conference "Bose-Einstein Condensation: Bose-Einstein Condensation in Atomic Vapors", Castelvecchio Pascoli, Italy
- 1999 International Summer Workshop "Flux, Charge, Spin and Statistics", Amsterdam, The Netherlands
- 1999 Workshop "Ultracold Gases and Liquids", Benasque, Spain
- 1999 International ESF Conference "Bose-Einstein Condensation 1999", San Feliu de Guixols, Spain
- 2000 International ESF Conference "Coherent Matter Fields", Cargese, France
- 2000 International Conference "Mesoscopics and Strongly Correlated Electron Systems", Chernogolovka, Russia
- 2001 International ESF Conference "Bose-Einstein Condensation 2001", San Feliu de Guixols, Spain
- 2001 International Summer Workshop "Flux, Charge, Spin and Statistics", Amsterdam, The Netherlands
- 2001 Workshop "Cold Atomic Gases", Konstanz, Germany.
- 2002 7th Workshop on Atomic Optics and Interferometry, Lunten, The Netherlands.
- 2003 Obergurgl Meeting 2003, Obergurgl, Austria.
- 2003 Amsterdam Summer Workshop "Flux, Charge, Topology and Statistics", Amsterdam, The Netherlands.
- 2003 International Workshop on Laser Physics, Seminar on Physics of Cold Atoms, Hamburg, Germany.
- 2005 International Workshop "Degenerate Quantum Gases", Fondation Les Trelles, Nice, France
- 2005 International Workshop "Few and Many-Body Physics in Quantum Liquids and Gases", Seattle, USA
- 2005 International ESF Conference "Bose-Einstein Condensation 2005", San Feliu de Guixols, Spain
- 2006 AMOP Meeting Frankfurt 2006, section "Ultracold dipolar gases", Frankfurt am Main, Germany
- 2007 International Workshop "Quantum Gases", Institute Henri Poincare, Paris, France

Funded Projects:

- 1997-1999 Project of the Russian Foundation for Basic Studies, Project Leader

- 1999-2002 Project of the Russian Foundation for Basic Studies, Project Leader
- 2000-2002 INTAS Grant, Group Leader
- 2001-2005 Project in the framework of the SFB program "Interaction effects in ultracold atomic and molecular gases", University of Hannover, Germany
- 2003-2006 Project of the Russian Foundation for Basic Studies, Project Leader
- 2007-2010 Project of the Russian Foundation for Basic Studies, Project Leader

Diploma students and PhD students:

- 1 Diploma student (D. Petrov) at Moscow Institute for Physics and Technics/Russian Research Center "Kurchatov Institute" Institute, Moscow, Russia
- 1 Diploma student (I. Burmistrov) at Moscow Institute for Physics and Technics/L.D. Landau Institute for Theoretical Physics, Chernogolovka, Russia
- 2 PhD students (D. Efremov, M. Mar'enko) at Moscow Institute for Physics and Technics/P.L. Kapitza Institute for Physical Problems
- 1 PhD student (I. Burmistrov) at Moscow Institute for Physics and Technics/L.D. Landau Institute for Theoretical Physics, Chernogolovka, Russia