

Irina Novikova, Ph.D.

Department of Physics
College of William&Mary
P.O. Box 8795
Williamsburg, VA 23187-8795

Phone: (757) 221-3693
FAX: (757) 221-3540
E-mail: inovikova@physics.wm.edu
Web: <http://physics.wm.edu/~inovikova/>

Professional experience

- 2012 - present** Associate Professor, Department of Physics, The College of William&Mary
2006 – 2012 Assistant Professor, Department of Physics, The College of William&Mary
2003 – 2006 Postdoctoral Fellow, Harvard-Smithsonian Center for Astrophysics
1998 – 2003 Research/Teaching graduate assistant, Physics Department, Texas A&M University

Education

- 1998 – 2003** Ph.D., Physics Department, Texas A&M University
Dissertation: Nonlinear magneto-optical effects in optically thick atomic vapor.
1992 – 1998 Diploma with honors, Moscow State Engineering Physics Institute, Russia
Diploma project: Study of the whispering-gallery eigenmodes of fused silica microsphere via tunable diode laser.

Awards

- 2017** • Jennifer and Devin Murphy Faculty Award
2012 • Alumni Fellowship Award, The William and Mary Alumni Association
2003 • Harvard-Smithsonian Center for Astrophysics Postdoctoral Fellowship.
• Distinguished Graduate Student Doctoral Research Award of the Association of Former Students, Texas A&M University
• AAPT Outstanding Teaching Assistant Award, Department of Physics, Texas A&M University.
2001 • Optical Society of America New Focus Student Award (Grand Prize)
• Ethel Ashworth-Tsutsui Memorial award for research

Professional service

- 2017-2020** Associate Editor for *Optica*
2017-2019 US Advisory Committee for the International Commission for Optics, member at large
2017 Program co-chair for CLEO: QELS Fundamental Science
2016-2019 Editorial Board Member for *Nature Scientific Reports*
2014 - 2016 Member of APS Member of APS International Travel Grant Award Program review committee review committee
2011 - 2017 Topical editor for *Optics Letters*
2011 - 2015 Chairman (2014, 2015) and Member (2011,2013) of the CLEO FS 1 Subcommittee
2014 Member of ICAP 2014 Program Committee
2008 - 2013 Member of the Optical Society of America Membership and Education Services Council

Peer reviewer

Physical Review Letters, Nature Photonics, Nature Physics, Science, Physical Review A, Optics Letters, New Journal of Physics, Journal of the Optical Society of America B, Optical Engineering, Optics Communications, Journal of Modern Optics, Optics Communications; National Science Foundation, Sandia National Laboratory, SNSF, CRDF.

Membership

American Physical Society, Optical Society of America

Grants

- 2016**
 - Air Force Office of Scientific Research "DURIP: Quantum imaging system for spatial mode control of atom-based squeezed vacuum states" (\$95,000)
 - Reves Center Faculty International Travel Grant (The College of William&Mary)
- 2014**
 - Reves Center Faculty International Travel Grant (The College of William&Mary)
- 2013**
 - Air Force Office of Scientific Research (2013-2017) "Nonlinear and quantum optical effects based on long-lived spin coherence in atomic ensembles at high optical depth" (\$185,901)
 - National Science Foundation (2013 - 2016) "Generation of macroscopic optical polarization Bell states in atomic ensembles via four-wave mixing" (\$300,000)
 - NAVAIR STTR Phase II (2013-2015) (co-PI) "Modeling of pulse propagation in a four-level atomic medium for gyroscopic measurements" (\$450,000)
 - Jeffress Trust Awards Program in Interdisciplinary Research (2013-2015) (co-PI) "Computational tools for controlling the thin film properties for optoelectronics and nanotechnology applications" (\$100,000)
- 2011**
 - NAVAIR STTR Phase I (2011-2012) (co-PI) "Modeling of pulse propagation in a four level atomic medium for gyroscopic measurements" (\$150,000)
- 2010**
 - National Science Foundation (2010-2015) (co-PI) " Plasmon resonances and metal insulator transitions in highly correlated thin film systems" (\$390,000)
 - APS international travel grant (with Dr. Arturo Lezama, Uruguay) (\$2,000)
 - Reves Center Faculty International Travel Grant (The College of William&Mary)
- 2009**
 - "LaserFest on the Road" outreach grant (\$5,840)
- 2008**
 - National Science Foundation (2008-2011) "Highly efficient photon-matter interfaces for quantum information applications" (\$380,000)
 - Army Research Office (2008) "DURIP: Widely tunable laser system for quantum optics and laser spectroscopy" (\$152,000)
 - Morton Science Fund "Upgrades for Experimental Atomic Physics course" (\$8,100)
 - Reves Center Faculty International Travel Grant (The College of William&Mary)
- 2007**
 - Reves Center Faculty International Travel Grant (The College of William&Mary)
- 2006**
 - Jeffress Research Grant (2007-2009) "Investigation of All-Optical Resonances for Compact Atomic Clocks using VCSEL-based Laser System" (\$44,000)