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Education

Ph.D. in Physics (specialities in Atomic physics and Quantum optics), 1998–2003
Dissertation: Nonlinear properties of dense coherent media
Physics Department, Texas A&M University

Diploma in Physics (speciality in Quantum electronics), 1992–1998
Moscow State Engineering Physics Institute

Employment History

Associate Professor, *2018–Present*
Department of Physics, College of William & Mary

Assistant Professor, *2013–2018*
Department of Physics, College of William & Mary

Research Assistant Professor, *2010–2013*
Department of Physics, College of William & Mary

Visiting Assistant Professor, *2006–2010*
Department of Physics, College of William & Mary

Postdoctoral Associate, *2003–2006*
Kavli Institute for Astrophysics and Space Research / LIGO Laboratory, Massachusetts Institute of Technology

Teaching/Research assistant, *1998–2003*
Physics Department, Texas A&M University

Research assistant, *1997–1998*
Frequency Standard Laboratory, Lebedev Physics Institute, Moscow, Russia

Awards

- **William Small Award for Faculty Excellence**, 2017
- **Named recipient of the Special Breakthrough Prize in Fundamental Physics**, 2016

Publications

1. Rob Behary, Alex Gill, Aaron Buikema, Eugeniy E. Mikhailov, Irina Novikova, "Rydberg Raman-Ramsey resonances in atomic vapor", *Phys. Rev. A*, **109**, 053706, (2024).
2. James McKelvy, Mario Gonzalez, Irina Novikova, Eugeniy E. Mikhailov, Andrey Matsko, "Technical limits of sensitivity for EIT magnetometry", *Applied Optics, Issue 24*, **62**, 6518-6527, (2023).
3. James McKelvy, Irina Novikova, Eugeniy E. Mikhailov, Mario Gonzalez, Isaac Fan, Yang Li, Ying-Ju Wang, John Kitching, Andrey Matsko, "Application of Kernel Principal Component Analysis for Optical Vector Atomic Magnetometry", *Machine Learning: Science and Technology*, ad0fa4, (2023).
4. Charris Gabaldon, Pratik J. Barge, Savannah L. Cuozzo, Irina Novikova, Hwang Lee, Lior Cohen, Eugeniy E. Mikhailov, "Quantum fluctuations spatial mode profiler", *AVS Quantum Science*, **5**, 025005, (2023).
5. Savannah L. Cuozzo, Charris Gabaldon, Pratik J. Barge, Ziqi Niu, Hwang Lee, Lior Cohen, Irina Novikova, Eugeniy E. Mikhailov, "Wave-Front Reconstruction via Single-Pixel Homodyne Imaging", *Optics Express, Issue 21*, **30**, 37938--37945, (2022).
6. Pratik J. Barge, Ziqi Niu, Savannah L. Cuozzo, Eugeniy E. Mikhailov, Irina Novikova, Hwang Lee, Lior Cohen, "Weak Thermal State Quadrature-Noise Shadow Imaging", *Optics Express, Issue 16*, **30**, 29401--29408, (2022).
7. David D. Smith, Hongrok Chang, Eugeniy E. Mikhailov, Selim M. Shahriar, "Beyond the Petermann limit: can exceptional points increase sensor precision?", *Phys. Rev. A*, **106**, 013520, (2022).
8. Savannah L. Cuozzo, Pratik J. Barge, Nikunjkumar Prajapati, Narayan Bhusal, Hwang Lee, Lior Cohen, Irina Novikova, Eugeniy E. Mikhailov, "Low-Light Shadow Imaging Using Quadrature-Noise Detection with a Camera", *Advanced Quantum Technologies*, 2100147, (2022).
9. Elisha S. Matekole, Savannah L. Cuozzo, Nikunjkumar Prajapati, Narayan Bhusal, Hwang Lee, Irina Novikova, Eugeniy E. Mikhailov, Jonathan P. Dowling, Lior Cohen, "Quantum-Limited Squeezed Light Detection with a Camera", *Phys. Rev. Lett.*, **125**, 113602, (2020).

10. Han Bao, Junlei Duan, Shenchao Jin, Xingda Lu, Pengxiong Li, Weizhi Qu, Mingfeng Wang, Irina Novikova, Eugeniy E. Mikhailov, Kai-Feng Zhao, Klaus Mølmer, Heng Shen, Yanhong Xiao, "Spin squeezing of 10^{11}atoms by prediction and retrodiction measurements", *Nature*, **581**, 159-163, (2020).
11. Jian Sun, Xichang Zhang, Weizhi Qu, Eugeniy E. Mikhailov, Irina Novikova, Heng Shen, Yanhong Xiao, "Spatial Multiplexing of Squeezed Light by Coherence Diffusion", *Phys. Rev. Lett.*, **123**, 203604, (2019).
12. Gaetano Frascella, Eugeniy E. Mikhailov, Naoto Takanashi, Roman V. Zakharov, Olga V. Tikhonova, Maria V. Chekhova, "Wide-field SU(1,1) interferometer", *Optica, Issue 9*, **6**, 1233-1236, (2019).
13. Ravn M. Jenkins, Eugeniy E. Mikhailov, Irina Novikova, "Transit Ramsey EIT resonances in a Rb vacuum cell", *JOSA B, Issue 4*, **36**, 890-895, (2019).
14. Savannah L. Cuozzo, Eugeniy E. Mikhailov, "Dispersion-enhanced tunability of the laser-frequency response to the cavity-length change", *Phys. Rev. A*, **100**, 023846, (2019).
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20. LIGO Scientific Collaboration, VIRGO Collaboration, "Tests of General Relativity with GW170817", *Phys. Rev. Lett.*, **123**, 011102, (2019).
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26. LIGO Scientific Collaboration, "Search for Transient Gravitational-wave Signals Associated with Magnetar Bursts during Advanced LIGO's Second Observing Run", *The Astrophys. J., Number 2*, **874**, 163, (2019).
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69. LIGO Scientific Collaboration, Virgo Collaboration, "Supplement: The Rate of Binary Black Hole Mergers Inferred from Advanced LIGO Observations Surrounding GW150914", *The Astrophysical Journal Supplement Series*, **227**, IOP Publishing, 14, (2016).
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76. LIGO Scientific Collaboration, Virgo Collaboration, "Results of the deepest all-sky survey for continuous gravitational waves on LIGO S6 data running on the Einstein@Home volunteer distributed computing project", *Physical Review D*, **94**, American Physical Society, 102002, (2016).
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79. LIGO Scientific Collaboration, "Localization and broadband follow-up of the gravitational-wave transient GW150914", *The Astrophysical journal letters*, **826**, IOP Publishing, L13, (2016).
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