Curriculum Vitae • Saurabh Paul

Website: https://terpconnect.umd.edu/~pauls/
Email: pauls@umd.edu

PERSONAL INFORMATION

Name: Saurabh Paul
Address: 119 Collard Street
Jersey City
NJ 07306
Phone: 301-832-1186
Email: pauls@umd.edu
daffodils.muse@gmail.com
Website: https://terpconnect.umd.edu/~pauls/

EDUCATION

University of Maryland, College Park, MD
Pursuing a PhD in Physics — August 2008 - present
Advisor: Dr. Eite Tiesinga (January 2011 - present)

Indian Institute of Technology, Kanpur, India
Master of Science in Physics — May, 2008
Thesis: "Falling ball viscometry"

Banaras Hindu University, Varanasi, India
Bachelor of Science, Physics Honors — May, 2006

TECHNICAL SKILLS ACQUIRED

- **Scientific Computing:** Python, Fortran 90, C++, Mathematica.
- **Other Languages:** Gnuplot, UNIX Shell Scripts, LaTex, HTML, CSS.
- **Softwares:** Inkscape, Adobe- Lightroom, Photoshop, Dreamweaver, Microsoft- Word, Excel, PowerPoint.

SCHOLARSHIPS AND ASSISTANTSHIPS

- Graduate Research Assistantship at the Joint Quantum Institute, and Joint Center for Quantum Information and Computer Science, University of Maryland — August 2014 – present
- Graduate Research Assistantship at the Joint Quantum Institute, University of Maryland — January 2011 – July 2014
- Graduate Teaching Assistantship at the Dept. of Physics, University of Maryland — August 2010 – December 2010
- Graduate Research Assistantship, Center for Nano Physics and Advanced Materials, University of Maryland — January 2009 – July 2010
- Graduate Teaching Assistantship at the Dept. of Physics, University of Maryland — August 2008 – January 2009
- Merit-Cum-Means Scholarship at the Indian Institute of Technology, Kanpur, India — August 2006 – April 2008
- Scholarship for highest score in Physics, Chemistry and Mathematics, Banaras Hindu University, Varanasi, India — 2nd Year of B.Sc.

PUBLICATIONS

- **Saurabh Paul** and Eite Tiesinga, *Formation and decay of Bose-Einstein condensates in an excited band of a double-well optical lattice*, Physical Review A 88, 033615 (2013).
- **Saurabh Paul** and Eite Tiesinga, *Large effective three-body interaction in a double-well optical lattice.* Accepted for publication in Physical Review A (July, 2015).
- **Saurabh Paul** and Eite Tiesinga, *A Hubbard model for interacting bosonic atoms with controllable two- and three-body interactions based on effective-range corrections.* To be submitted to Physical Review A.
- **Saurabh Paul** and Eite Tiesinga, *Quantum phases in an asymmetric double-well optical lattice.* To be submitted to Physical Review A.

PRESENTATIONS

- **Saurabh Paul** and Eite Tiesinga, *Large effective three-body interaction in a double-well optical lattice*. Talk presented at the American Physical Society Division of Atomic, Molecular and Optical Physics, APS DAMOP 2015, Columbus, OH.
- **Saurabh Paul** and Eite Tiesinga, *Effective three-body interactions in an asymmetric double-well optical lattice.* Poster presented at Quantum Workshop in the Joint Center for Quantum Information and Computer Science, QuICS, MD.
- **Saurabh Paul** and Eite Tiesinga, *Quantum phases in an asymmetric double-well optical lattice.* Poster presented at the International Conference on Atomic Physics, ICAP 2014, Washington, D.C.
- **Saurabh Paul** and Eite Tiesinga, *Quantum phases in an asymmetric double-well optical lattice.* Talk presented at the American Physical Society Division of Atomic, Molecular and Optical Physics, APS DAMOP 2014, Madison, WI.
- **Saurabh Paul** and Eite Tiesinga, *Formation and decay of Bose Einstein condensates in an excited band of a double-well optical lattice.* Talk presented at the American Physical Society Division of Atomic, Molecular and Optical Physics, APS DAMOP 2013, Quebec City, Canada.
- **Saurabh Paul** and Eite Tiesinga, *Bose-Einstein Condensation in the second band of an optical lattice, a tight binding analysis and numerical estimate of its formation and decay.* Talk presented at the American Physical Society Division of Atomic, Molecular and Optical Physics, APS DAMOP 2012, Orange County, CA.
- **Saurabh Paul** and Eite Tiesinga, *Bose-Einstein Condensation in the P-band of a time-dependent double-well optical lattice.* Talk presented at the American Physical Society Division of Atomic, Molecular and Optical Physics, APS DAMOP 2011, Atlanta, GA.
- **Saurabh Paul** and Eite Tiesinga, *Bose Einstein condensation in the higher band of a time-dependent double-well optical lattice.* Candidacy Talk presented at the Center for Nanophysics and Advanced Materials, CNAM, MD.
- **Saurabh Paul** and Eite Tiesinga, *Bose Einstein condensation in the higher band of a time-dependent double-well optical lattice.* Poster presented at Les Houches PreDoc 2011 School, cold gases with long range interactions, Les Houches, France.

TEACHING

- Physics 375, Experimental Physics III: Electromagnetic Waves, Optics and Modern Physics. Fall 2008, Dept. of Physics, University of Maryland. *(Graduate Teaching Assistant).*
- Physics 122, Fundamentals of Physics II, Fall 2010, Dept. of Physics, University Of Maryland. *(Graduate Teaching Assistant).*

MEMBERSHIPS

- Student member, American Physical Society.
- Alumni Association, Indian Institute of Technology, Kanpur, India.