Personal Information

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**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 2*nd* 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 atLes 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.