

Yehuda Snir Curriculum Vitæ

Department of Physics and Astronomy
209 South 33rd Street
University of Pennsylvania
Philadelphia, PA 19104-6396
Phone: 215-898-5988
Fax: 215-898-2010
ysnir@physics.upenn.edu
<http://www.physics.upenn.edu/~ysnir>

Professional Experience

Aug. 2001 – **Graduate Student** Department of Physics and Astronomy, University of Pennsylvania
Aug 2001 – May 2004 **Teaching Assistant** Department of Physics and Astronomy, University of Pennsylvania
June 2000 – May 2001 **Undergraduate Researcher** Sloan Digital Sky Survey, University of Pittsburgh
June 1999 – May 2000 **Undergraduate Researcher** Sloan Digital Sky Survey, Carnegie Mellon University
June 1998 – Aug 1998 **Researcher** T.J. Watson Research Facilities, IBM

Education

Oct 2006 **M.S. Physics and Astronomy** University of Pennsylvania, Philadelphia, PA
May 2001 **B.S. Physics (with Honors)** Carnegie Mellon University, Pittsburgh, PA
May 2001 **B.S. Mathematics (with Honors)** Carnegie Mellon University, Pittsburgh, PA

Teaching Experience

Sept 2005 – May 2006 **Tutor for Principles of Physics I & II** (phys-101, phys-102) University of Pennsylvania
Sept 2004 – Dec. 2004 **Grader for Mathematical Methods of Physics & Statistical Mechanics (phys-500, phys-611)** University of Pennsylvania
Helped make up homework problems and held office hours in addition to grading duties
Sept 2003 – May 2004 **Teaching Assistant for Principles of Physics I & II (phys-150, phys-151)** University of Pennsylvania
Held office hours twice weekly
Jan 2003 – May 2003 **Grader for Electrodynamics Theory II and Intro to Solid State Physics(phys-516, phys-518)** University of Pennsylvania
Held occasional recitation session reviewing the weeks lessons and homework problems along with grading class assignments
Sept 2002 – Dec 2002 **Teaching Assistant for Principles III (phys-230)** University of Pennsylvania
Held weekly recitation session reviewing the weeks lessons and homework problems along with grading class assignments
Sept 2001 – Aug 2002 **Lab Instructor for Principles of Physics I & II Labs (phys-101, phys-102, phys-150, phys-151)** University of Pennsylvania
Held 5-10 minute lecture on experiment and then supervised and assisted in students laboratory work

Sept 2000 – Dec 2000 **Grader for Concepts of Mathematics (21-127)** Carnegie Mellon University

Awards, Fellowships

July 2005 **Awarded the Dissertation Fellowship for Graduate Research**
May 2001 **Elected to Phi Beta Kappa National Honors Society**
March 2000 **Elected to Pi Mu Epsilon Honorary National Mathematics Society.**

Contributed Conference Presentations

Y. Snir, R.D. Kamien, “Entropically Driven Helix Formation” APS March Meeting, Los Angeles, CA, March 2005.
Y. Snir, R.D. Kamien, ”Entropically Driven Helix Formation” ACS Annual Meeting, Philadelphia, PA, August 2004.
Y. Snir, R.D. Kamien, “Entropically Driven Helix Formation” APS March Meeting, Montreal, Canada, March 2004.

Invited Presentations

Y. Snir, “Entropically Driven Helix Formation” APS March Meeting, Baltimore, MD, March 2006.
Y. Snir, R.D. Kamien, “Entropically Driven Helix Formation” ICMENS, Banff, Canada, July 2005.

Seminars

Ecole Supérieure de Physique et de Chimie Industrielles (June 2004)
Université Paris Sud XI (June 2004)

Professional Memberships

American Physical Society, American Chemical Society

Professional Activities

Boulder School for Condensed Matter Physics on “Physics of Soft Matter: Complex Fluids and Biological Materials” University of Colorado, Boulder (July 2006).

Reviewer for *Physical Review E*.

Publications

Y. Snir, R.D. Kamien, “Helical Tubes in Crowded Environments” *Physical Review E* **75**, 051114 (May 2007) also appears in *Virtual Journal of Nanoscale Science & Technology*, (June 4, 2007) and the *Virtual Journal of Biological Physics Research*, (June 1, 2007).

J.R. Banavar et al, “Geometry of proteins: Hydrogen bonding, sterics, and marginally compact tubes” *Physical Review E* **73**, 031921 (March 2006).

Y. Snir, R.D. Kamien, “Entropically Driven Helix Formation” *Science* **307**, 1067 (Feb 2005).

- I. Zehavi et al, "Galaxy Clustering in Early SDSS Redshift Data" *Astrophysical Journal* **571**, 172 (May 2002).
- D.P. Schneider et al, "The Sloan Digital Sky Survey Quasar Catalog. I. Early data release" *Astronomical Journal* **123**, 567 (Feb 2002).
- D.E. Vanden Berk et al, "Composite Quasar Spectra from the Sloan Digital Sky Survey" *Astronomical Journal* **122**, 549 (Aug 2001).
- G.T. Richards et al, "Colors of 2625 Quasars at $0 < z < 5$ Measured in the Sloan Digital Sky Survey Photometric System" *Astronomical Journal* **121**, 2308 (May 2001).
- F. J. Castander et al, "The First Hour of Extragalactic Data of the Sloan Digital Sky Survey Spectroscopic Commissioning: The Coma Cluster" *Astronomical Journal* **121**, 2321 (May 2001).
- M. R. Blanton et al, "The Luminosity Function of Galaxies in SDSS Commissioning Data" *Astronomical Journal* **121**, 2358 (May 2001).

References

- Prof. Randall Kamien
Department of Physics and Astronomy, University of Pennsylvania
109 S. 33rd St, Philadelphia, PA 19104 USA
kamien@physics.upenn.edu
+1.215.898.5940
- Prof. Eugene Mele
Department of Physics and Astronomy, University of Pennsylvania
109 S. 33rd St, Philadelphia, PA 19104 USA
mele@physics.upenn.edu
+1.215.898.3135
- Dr. Christian Santangelo
Department of Physics and Astronomy, University of Pennsylvania
109 S. 33rd St, Philadelphia, PA 19104 USA
santancd@sas.upenn.edu
+1.215.898.8150