Kerstin Nordstrom
Curriculum Vitae
Department of Physics and Astronomy
University of Pennsylvania
Philadelphia, PA 19104
(215) 746-2271
knordstr@sas.upenn.edu

***EDUCATION**:*

Doctoral Student, Physics, present
University of Pennsylvania, Philadelphia, PA

M.S., Physics, 2006
University of Pennsylvania, Philadelphia, PA

B.A., Physics and Mathematics, with honors, 2004
Bryn Mawr College, Bryn Mawr, PA

***RESEARCH EXPERIENCE**:*

Research Assistant, 2006-present
Microfluidics, microfabrication, complex fluids, biophysics, synthesis and characterization of microgel colloids, optical microscopy
Department of Physics and Astronomy, University of Pennsylvania
Advisors: Doug Durian and Jerry Gollub

Researcher, 2004-05
Synthesis of nanoparticles, nanofabrication, design of an AFM cold finger
Department of Physics and Astronomy, University of Pennsylvania
Advisor: Marija Drndic

Undergraduate Researcher, 2003-04
Solid-state NMR of organic molecules
Department of Physics, Bryn Mawr College
Advisor: Peter Beckmann

Undergraduate Research Fellow, 2004
Synthesis and characterization of nanoparticles (REU)
Department of Chemistry, Columbia University, New York, NY
Advisor: Nicholas Turro

TEACHING EXPERIENCE:

Teaching Fellow, Center for Teaching and Learning, 2005
School of Arts and Sciences, University of Pennsylvania

Teaching Assistant, 2004-06
Laboratory and Lecture
Department of Physics and Astronomy, University of Pennsylvania

Teaching Assistant, 2001-04
Laboratory
Department of Physics, Bryn Mawr College

PUBLICATIONS:

Fitzroy J. Byfield, Qi Wen, Ilya Levental, Kerstin Nordstrom, Douglas J. Durian, Paulo E. Arratia, R.Tyler Miller, Paul A. Janmey
"Absence of filamin A prevents cells from responding to substrate stiffness on gels coated with collagen but not fibronectin." in preparation for *Biophys J*

P.A. Beckmann, J. Rosenberg, K. Nordstrom, C.W. Mallory, F.B. Mallory, "CF3 rotation in 3-(trifluoromethyl)phenanthrene: Solid state F-19 and H-1 NMR relaxation and Bloch-Wangsness-Redfield theory," *Journal of Physical Chemistry A*, **110** , 11 (2006)

"A Solid State Nuclear Magnetic Resonance Relaxation Study of 1,3-dimethoxy-4-tert-butylcalix[4]arene"
Senior Thesis

"An Introduction to Mathematica"
Tutorial used in present Bryn Mawr College Physics classes

MEETINGS, WORKSHOPS, AND TALKS:

PCCM – Rhodia Symposium "Guided Self Assembly"
Attendee
Nov 4-5th 2005, Princeton University

4th Annual Northeastern Granular Materials Workshop
Attendee
June 9th, 2006, City College of New York

Soft Matter Workshop
Soundbite
Nov 2 2006, UPenn

APS March Meeting
Attendee
March 5-9, 2007 Denver CO

NSF-MRSEC seminar
Invited speaker
June 29, 2007, UPenn

J-Fest workshop
Speaker
Oct 24, 2007, UPenn

100th Statistical Mechanics Conference
Soundbite
Dec 13-18, 2008, Rutgers

Gordon Research Conference, Granular & Granular-Fluid Flow
Poster
June 22-27, 2008, Colby College

Mid-Atlantic Soft Matter Workshop
Soundbite
Oct 17 2008, University of Delaware

61st Annual Meeting of the APS Division of Fluid Dynamics
Contributed Talk
November 23-25, 2008. San Antonio, TX

AWARDS AND HONORS:
Chairman's Teaching Award, 2005
Department of Physics and Astronomy, University of Pennsylvania

OUTREACH:
NanoDay @ Penn, 2005
Designed and presented a booth about Drndic Lab research
Nano/Bio Interface Center (NBIC), University of Pennsylvania
High School Math and Science tutor, 2005-present
Greater Philadelphia area

AFFILIATIONS:
American Physical Society
Women Interested in the Study of Physics (WISP)
University of Pennsylvania

REFERENCES*:*
Upon request.