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PERSONAL INFORMATION

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EDUCATION

University of California, Santa Barbara, Santa Barbara, CA, 2000 - 2005.

Graduate Student, Biomolecular Science and Engineering Program.
Field of study: *Theoretical Soft Condensed Matter, Theoretical Biophysics.*
Advisor: Philip A. Pincus.
Mentor: A.J. Levine.
Ph.D. Biomolecular Science and Engineering.
thesis: *"Intermolecular adhesion in conjugated polymers."*

Northwestern University, Evanston, IL, 1995-1999.

B.A. Integrated Sciences Program and Biological Sciences.

AWARDS AND HONORS

Materials Research Laboratory Travel Grant, 2002, 2003, 2004.

RESEARCH EXPERIENCE

Postdoctoral Fellow, Brandeis University, 2005-present.

Performed independent analytic research in polymer physics and biophysics in the groups of Jané Kondev and Bulbul Chakraborty.

Graduate Research Assistant, University of California, Santa Barbara, 2000-2005.

Performed independent analytic and numerical research in polymer physics and biophysics. Advisor: Philip Pincus.

Lab Rotation, University of California, Santa Barbara, 1999-2000.

Performed independent research in biophysics with three research groups. Advisors: D. K. Fygenson, P. A. Pincus, J. T. Gerig

TEACHING EXPERIENCE

Teaching Assistant, University of California, Santa Barbara, 2002.

Lead discussion and laboratory sections, and graded labs, tests, and problems for first-year Introductory physics.

EXTRACURRICULARS

I build and customize computers and telescopes. I am also an accomplished swimmer (three time letterman at NU) and rugby player.

PROFESSIONAL ACTIVITIES

Condensed Matter Reading Group, Department of Physics, University of California, Santa Barbara, 2002-present.

American Physical Society, Member, 2001-present.

SEMINARS

Brandeis University, “Intermolecular Bonding in Conducting Polymers”, September 2005.

Clark University, “Covalent-like Bonding Between Conjugated Polymers”, December 2004.

University of Massachusetts, Amherst, “Conjugated Polymers: The world’s smallest wires”, December 2004.

University of California, Santa Barbara, “Quantum Stickiness in Biosensing Polymers”, January 2004.

University of Massachusetts, Amherst, “Quantum Stickiness in Biosensing Polymers”, November 2003.

PUBLICATIONS

J. D. Schmit and A. J. Levine, “Intermolecular adhesion in conjugated polymers: The role of the band gap and solitonic excitations”, *Phys. Rev. E*, *in preparation*.

J. D. Schmit and A. J. Levine, “Intermolecular adhesion in conjugated polymers”, *Phys. Rev. Lett.*, *in preparation*.

J. D. Schmit and A. J. Levine, “Intermolecular adhesion in conducting polymers”, *Phys. Rev. E* **71**, 051802 (2005).

J. Schmit, R. Menes, and P.A. Pincus, “Dielectric-induced counterion partitioning and its effect on membrane rigidity”, *Phys. Rev. E* **66**, 061502 (2002).

CONFERENCE PRESENTATIONS

Contributed Talk, with Jané Kondev, “Polymer models of bacterial chromosomes” New England Complex Fluids Workshop, Waltham, MA, September 2006.

Contributed Talk, with A.J. Levine, “Intermolecular bonding in conjugated polymers: The effect on aggregate morphology,” American Physical Society March Meeting, Baltimore, MD, March 2006.

Contributed Talk, with Joshua Martin, Bulbul Chakraborty and Jané Kondev, “Polymer dynamics within a harmonic confinement potential,” American Physical Society March Meeting, Baltimore, MD, March 2006.

Contributed Talk, with A.J. Levine, “Covalent-like bonding between conjugated polymers,” Greater Boston Area Statistical Mechanics Meeting, Waltham, MA, October 2005.

Poster, with A.J. Levine, “Intermolecular Bonding in Conducting Polymers”, American Conference on Theoretical Chemistry, University of California, Los Angeles, July 2005.

Contributed Talk, with A.J. Levine, “Intermolecular bonding in conjugated polymers,” American Physical Society March Meeting, Los Angeles, CA, March 2005.

Contributed Talk, with A.J. Levine, “Intermolecular Bonding in Metallic Polymers,” American Physical Society March Meeting, Montreal, QC, Canada, March 2004.

Poster, with A.J. Levine, “Intermolecular Bonding in Conducting Polymers”, National Science Foundation Site Visit Poster Session, University of California, Santa Barbara, February 2004.

Poster, with A.J. Levine, “Intermolecular Bonding in Conducting Polymers”, UCSB-Singapore Workshop Poster Session, University of California, Santa Barbara, April 2004.

Contributed Talk, with P.A. Pincus, “Self Energy Effects on Membrane Rigidity,” American Physical Society March Meeting, Indianapolis, IN, March 2003.

Poster, with R. Menes and P.A. Pincus, “Dielectric Induced Counter-Ion Partitioning and its Effect on Membrane Rigidity”, Materials Research Outreach Program Symposium, University of California, Santa Barbara, California, January 2002.

REFERENCES

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