# Curriculum Vitae

# Alexander J. Levine

University of California, Los Angeles Department of Chemistry & Biochemistry 3044A Young Hall 607 Charles E. Young Dr., East Los Angeles, CA 90095 715 Gayley Ave # 315 Los Angeles, CA 90024 (413) 262-8220 web: http://www.chem.ucla.edu

### $Education\_$

1989–1996	l
1989–1990	
1985–1989	

# $Employment_{-}$

Sept. 2002 – July 2005..... University of Massachusetts, Amherst, Assistant Professor.

2001 – Aug. 2002 . . . . . . . . University of California, Santa Barbara, **Postdoctoral Researcher.** My postdoctoral research focused on the following topics:

- Modeling microtubule dynamics during cell division
- Membrane microrheology

- Dynamics of nematic elastomers
- Chiral phases of polymeric liquid crystals
- Microscopic modelling of microrheology techniques
- Taught Introductory Electricity and Magnetism (Summer Session)

- Theory of wax crystal nucleation
- Non-linear stability analysis of the polymer film blowing process
- Developing theory of stress relaxation in star polymer melts
- Capillary waves at liquid-liquid interfaces
- The failure of cohesive granular material
- The non-equilibrium statistical mechanics of non-Brownian sedimentation

June 1995–Sept. 1995..... Lucent Technologies / AT&T Bell Labs, Research Assistant.

• Dynamics of driven charge density waves with S. N. Coppersmith.

Sept. 1994—June 1995 . . . . . University of California, Los Angeles, Professional Development Program, UCLA Department of Physics, Instructor

June 1994—Sept. 1994...... AT&T Bell Laboratories, Research Assistant.

# Awards and Fellowships

1993–1996 AT&T Graduate Fellowship
1989 $\Phi$ BK Scholarship
1989Julian Schwinger Graduate Fellowship
1988 Election to Mathematics Honors Society
1988 Election to $\Phi BK$
1987 Joined Physics Honors Society $\Sigma$
1985 Extension of Alumni Fellowship for a second year Freshman Honors Society Golden Key Honors Society
Alumni Scholarship University of California
Four Year Regents Scholarship University of California

# $Publication\ List\_$

## **Articles in Preparation**

- 1. Alex J. Levine and F.C. MacKintosh *The Dynamics of Semiflexible Polymers in Solution and Gel* Advances in Physics **Invited** (2007).
- 2. Alex J. Levine, J.C. Crocker, and T.C. Lubensky *Microrheology* Reports on Progress in Physics **Invited** (2006).
- 3. Mark L. Henle and Alex J. Levine *The mobility of point and extended particles on spherical viscous interfaces*, Physical Review E (2006).
- 4. Mark L. Henle, Ryan McGorty, A.D. Dinsmore, and Alex J. Levine *The effect of interfacial curvature on the mobility extended bodies*, Physical Review Letters (2006).
- Jeremy D. Schmit and Alex J. Levine Intermolecular Adhesion in Undoped Conjugated Polymers, Physical Review Letters (2006).
- 6. Jeremy D. Schmit and Alex J. Levine *The role of solitonic excitations in intermolecular adhesion in undoped conjugated polymers*, Physical Review E (2006).
- 7. Leonardo Silbert, Gary S. Grest, Robert Brewster, and Alex J. Levine Contact Lifetimes in Dense Granular Flows, Physical Review Letters (2006).
- 8. Robert Brewster, Leonardo Silbert, Gary S. Grest, and Alex J. Levine *Two particle contact lifetimes and rheology in gravity driven granular flows*, Physical Review E (2006).

### Submitted

- 9. Mark L. Henle and Alex J. Levine Capillary wave dynamics on supported viscoelastic films: Single and double layers, Submitted to Physical Review E (2006).
- B.A. DiDonna and Alex J. Levine Filamin cross-linkers as rheology sregulators in F-actin networks Submitted to Physical Review E (2006).
- 11. Moumita Das, F.C. MacKintosh, and Alex J. Levine Effective medium theory of semiflexible filamentous networks, Submitted to Physical Review Letters (2006).
- 12. Alex J. Levine *The helix-coil transition on the worm-like chain*. Submitted to Physical Review Letters (2005).

### Accepted for Publication

- 13. J.R. Savage, D. Blair, A.J. Levine, R.A. Guyer, and A.D. Dinsmore *Cross-over in the Rate of Sublimation of Two-Dimensional Crystallites* Accepted Science (2006).
- 14. Buddhapriya Chakrabarti and Alex J. Levine The nonlinear elasticity of an  $\alpha$ -helical polypeptide: Monte Carlo studies Accepted Physical Review E (2006).

### Published

- 15. B.A. DiDonna and Alex J. Levine *Filamin cross-linked semiflexible networks: Fragility under strain* Physical Review Letters **97**, 068104 (2006).
- 16. M. Atakhorrami, J.I. Sulkowska, K.M. Addas, G.H. Koenderink, J.X. Tang, A.J. Levine, F.C. MacKintosh, and C.F. Schmidt Correlated fluctuations of microparticles in viscoelastic solutions: Quantitative measurement of material properties by microrheology in the presence of optical traps Physical Review E 73, 061501 (2006).
- 17. R. Brewster, J. Landry, G.S. Grest, and A.J. Levine *Breakdown of Bagnold scaling in cohesive granular flows*, Physical Review E **72**, 061301 (2005).
- 18. David A. Head, Alex J. Levine, and F.C. MacKintosh Short-range deformation of semiflexible networks: deviations from continuum elasticity. Physical Review E 72, 061914 (2005).
- Jeremy D. Schmit and Alex J. Levine Intermolecular adhesion in conducting polymers Physical Review E 71, 051802 (2005).
- 20. Buddhapriya Chakrabarti and Alex J. Levine The nonlinear elasticity of an  $\alpha$ -helical polypeptide Physical Review E 71, 031905 (2004).
- 21. Alex J. Levine, David A. Head, and F.C. MacKintosh *The elasticity of semiflexible networks*, Proceedings of the XIV<sup>th</sup> Congress on Rheology. ed. The Korean Society of Rheology (2004).
- 22. Alex J. Levine, David A. Head, and F.C. MacKintosh *The Deformation Field in Semiflexible Networks*, Journal of Physics, Condensed Matter **16**, S2079 (2004).
- 23. Alex J. Levine, T.B. Liverpool, and F.C. MacKintosh *Dynamics of extended bodies in viscous films and membranes*, Physical Review Letters **93**, 038102 (2004).
- 24. Alex J. Levine, T.B. Liverpool, and F.C. MacKintosh *The mobility of extended bodies in viscous films and membranes*, Physical Review E **69**, 021503 (2004).
- David A. Head, Alex J. Levine, and F.C. MacKintosh Distinct regimes of elastic response and deformation modes of cross-linked cytoskeletal and semiflexible polymer networks, Physical Review E 68, 061907 (2003).
- 26. David A. Head, F.C. MacKintosh, and Alex J. Levine *Non-universality of elastic exponents in random bond-bending networks*. Physical Review E **68**, 025101 (R) (2003).
- 27. David A. Head, Alex J. Levine, and F.C. MacKintosh Deformation of cross-linked semiflexible polymer networks, Physical Review Letters 91, 108102 (2003).
- Victor Breedveld and Alex J. Levine Shear induced diffusion in dilute suspensions of charged colloids, Soft Materials 1, 235-244 (2003).
- D.T. Chen, E.R. Weeks, J.C. Crocker, M.F. Islam, R. Verma, J. Gruber, A.J. Levine, T.C. Lubensky, and A.G. Yodh *Rheological Microscopy:Local Mechanical Properties from Microrheology*, Physical Review Letters 90, 108301 (2003).
- 30. Alex J. Levine and F.C. MacKintosh *Dynamics of viscoelastic membranes*, Physical Review E **66**, 061606 (2002).
- 31. Deniz Ertaş, Thomas C. Halsey, Alex J. Levine, and Thomas G. Mason, *Stability of monomer-dimer piles*, Physical Review E **66**, 051307 (2002).

- 32. Alex J. Levine and T.C. Lubensky Two-point microrheology and the electrostatic analogy, Physical Review E 65, 011501 (2002).
- 33. K.M. Addas, J.X. Tang, A.J. Levine, and C.F. Schmidt Extracting local and bulk viscoelasticity of entangled FD virus solutions by two-bead microrheology, Biophysical Journal 82 (1) 2432 (2002).
- 34. Karim M. Addas, Alex J. Levine, Jay X. Tang, and Christoph F. Schmidt *One- and Two-Particle Microrheology in Entangled Solutions of fd Virus*, Physical Characterization of Biological Materials and Systems Symposium. Boston, MA USA 26 Nov. 30 Nov. 2001. Warrendale, PA, USA Materials Research Society, (2002).
- 35. R. Bruinsma, F. Rondelez, and A. Levine Flow-Controlled Island Growth in Langmuir Monolayers, European Physics Journal E 6, 191 (2001).
- 36. Alex J. Levine and T.C. Lubensky *The response function of a sphere in a viscoelastic two-fluid medium*, Physical Review E, **63**, 041510-1 (2001).
- 37. Alex J. Levine and T.C. Lubensky One- and two-particle microrheology, Physical Review Letters 85, 1774 (2000).
- 38. Randall D. Kamien and Alex J. Levine *Boundary Effects in Chiral Polymer Hexatics*, Physical Review Letters 84, 3109 (2000).
- 39. T. G. Mason, A. J. Levine, D. Ertaş, and T. C. Halsey *The Critical Angle of Wet Sand Piles*, Physical Review E **60**, R5044 (1999)
- 40. A. Levine, S. Ramaswamy, E. Frey, and R. Bruinsma "Hydrodynamic Screening in Stokesian Fluidized Beds" in Structure and Dynamics of Materials in the Mesoscopic Domain (Prox. 4<sup>th</sup> Royal Society–Unilever Indo-UK Forum in Materials Science and Engineering), Eds. Moti Lal, R.A. Mashelkar, B.D. Kulkarni, V.M. Naik (Imperial College Press and The Royal Society, 1999) pp. 195–206.
- 41. Amy B. Herhold, Deniz Ertaş, Alex J. Levine, and Hubert E. King Jr. *Impurity mediated nucleation in hexadecane-in-water emulsions.*, Physical Review E **59**, 6946 (1999).
- 42. Amy B. Herhold, Deniz Ertaş, Alex J. Levine, and Hubert E. King Jr. *Impurity induced slowing of nucleation in emulsified liquids* in <u>Dynamics in Small Confining Systems IV</u> Symposium, Boston, MA USA 30 Nov. 3 Dec. 1998. Warrendale, PA, USA: Materials Research Society, pp.85–96 (1999).
- 43. Alex Levine, Sriram Ramaswamy, Erwin Frey, and Robijn Bruinsma, Screened and Unscreened Phases in Sedimenting Suspensions, Physical Review Letters 80, 5944 (1998).
- 44. Alex J. Levine and Scott T. Milner, Star Polymers and the Failure of Time-Temperature Superposition, Macromolecules **31** (24) 8623 8637 (1998).
- 45. Alex J. Levine and Thomas C. Halsey, How Sandcastles Fall, Physical Review Letters 80, 3141 (1998)
- 46. Martin-D. Lacasse, Gary S. Grest, and Alex J. Levine, Capillary-wave and chain-length effects at polymer/polymer interfaces, Physical Review Letters 80, 309 (1998).
- 47. S. N. Coppersmith, T. C. Jones, L. P. Kadanoff, A. Levine, J. P. McCarten, S. R. Nagel, S. C. Venkataramani, and Xinlei Wu, *Self-Organized Short-Term Memories*, Physical Review Letters **78**, 3983 (1997).
- 48. Shechao Feng, Alex Levine, and Lan Yin, Suppression of the Josephson Effect and Little-Parks Oscillations in the Quantum Hall Effect, in Coulomb and Interference Effects in Small Electronic Structures ed. D. C Glattli, M. Sanquer, and J. Tran Thanh Van, Éditions Frontières (1994).
- 49. Shechao Feng, Alex Levine, and Lan Yin, Suppression of the Josephson Effect by Quantum Fluctuations in the Fractional Quantum Hall State, Physical Review B. **50**, 11045 (1994).

- UCLA: Graduate Statistical Mechanics Part B, Winter 2006.
- UCLA: Graduate Statistical Mechanics Part A, Fall 2005.
- UMASS: Graduate Biological Physics, Spring 2004.
- UMASS: Freshman Physics Colloquium: "Proteins: Your own Nanomachines," Fall 2004.
- UMASS: Honors Freshman Mechanics, Spring 2003.
- UMASS: Freshman Mechanics, Spring 2003.
- UMASS: Freshman Physics Colloquium: "Viruses and Self-Assembly," Fall 2003.
- UMASS: Soft Condensed Matter Physics: Independent Study, Spring 2003.
- UMASS: Graduate Classical Mechanics Fall 2002, Fall 2003, Fall 2004.
- UPENN: Introductory Electricity and Magnetism 06/15/2000 08/31/2000 Summer Session.

# Grants and Contracts

- Active "Mechanical Properties of Thin-Film Active Materials," NSF-INT/DMR-0354113 [co-I with Professor M. Dennin (UCI)] 09/01/2004 08/31/2007. Total: \$540,000; for Levine \$300,000.
- Active "Gelation of Colloidal Particles on Droplet Surfaces: Dimension, Curvature, and Droplet Elasticity," NASA-NRA-02-OBPR-03-C [co-I with Professor A.D. Dinsmore (UMASS)] 01/01/2005 – 12/31/2008. Total: \$625,000; for Levine \$300,000.
- Active "Deformation of an elastic membrane by a semiflexible network: Biomimetic approaches and aerospace applications" 05/01/2006 04/30/07. Lockheed Martin PI: Levine, Total: \$100,000

## $Invited Talks \_$

- 1. The elasticity of semiflexible networks: Implications for the cytoskeleton, Department of Chemical Engineering Colloquium, University of Florida, Gainesville September 2006.
- 2. The elasticity of semiflexible networks: Implications for the cytoskeleton, Department of Physics Colloquium, University of Colorado, Boulder August 2006.
- 3. Sailing the surfactant sea: Hydrodynamics in membranes and fluid/fluid interfaces, Condensed Matter Seminar Department of Physics, University of Colorado, Boulder August 2006.
- 4. The elasticity of semiflexible networks: Implications for the cytoskeleton, Ecole Supérieure de Physique et de Chimie Industrielles, Paris France April 2006.
- 5. Sailing the surfactant sea: Hydrodynamics in membranes and fluid/fluid interfaces, IPAM Workshop I: Membrane Protein Science and Engineering, UCLA, Los Angeles, CA, USA. March 2006.
- 6. The worm turns: The statistical mechanics of alpha-helical polypeptides, Seminar Biomathematics Department, University of California, Los Angeles March 2006.
- 7. Microrheology in polymer solutions: Depletion and the shell model, American Chemical Society, Washington D.C. August 2005.
- 8. Sailing the surfactant sea: Hydrodynamics in membranes and fluid/fluid interfaces, Frontiers in Biomembranes, Benasque, Spain August 2005.
- 9. The elasticity of semiflexible networks: Implications for the cytoskeleton, Gordon Conference on Gels, Networks, and Elastomers, New London, NH July 2005.
- The elasticity of semiflexible networks: Implications for the cytoskeleton, Seminar, UCLA Chemistry, January 2005.
- 11. The elasticity of semiflexible networks: Implications for the cytoskeleton, Colloquium, Arizona State University, Department of Physics February 2005.

- 12. The statistical mechanics of alpha-helical polypeptides, Beckman Institute, University of Illinois at Urbana-Champaign, October 2004.
- 13. The elasticity of semiflexible networks: Implications for the cytoskeleton, University of Washington, Department of Physics October 2004.
- 14. The statistical mechanics of alpha-helical polypeptides, National Central University, Taiwan August 2004.
- 15. Static and flowing wet sand: Dragging Mr. Bagnold through the mud, Academica Sinica, Taiwan July 2004.
- Sailing the surfactant sea: Hydrodynamics in membranes and fluid/fluid interfaces, Academica Sinica, Taiwan July 2004.
- 17. Microrheology, Academica Sinica, Taiwan July 2004.
- 18. Affine vs. Nonaffine Deformations in Semiflexible Polymer Networks, National Central University, Taiwan July 2004.
- 19. Affine vs. Nonaffine Deformations in Semiflexible Polymer Networks, Clarke University Department of Physics April 2004.
- 20. Affine vs. Nonaffine Deformations in Semiflexible Polymer Networks March 2004 Meeting of the American Physical Society, Montreal Canada. March 2004.
- 21. Affine vs. Nonaffine Deformations in Semiflexible Polymer Networks February 2004 UCLA Department of Chemistry, Los Angeles, CA.
- 22. Affine vs. Nonaffine Deformations in Semiflexible Polymer Networks February 2004 Theory Division, Los Alamos National Laboratories, Los Alamos, NM.
- 23. The worm turns: The helix-coil transition on the worm-like chain January 2004 The Isaac Newton Institute for Mathematical Sciences, Cambridge University, Cambridge England.
- 24. Affine vs. Nonaffine Deformations in Semiflexible Polymer Networks Department of Chemistry Seminar, Florida State University. November 21, 2003.
- 25. Sailing the Surfactant Sea: Membrane Hydrodynamics and Interfacial Microrheology Department of Physics Colloquium, Brandeis University. November 18, 2003.
- 26. Affine vs. Nonaffine Deformations in Semiflexible Polymer Networks Physics Department Seminar, Brown University. November 5, 2003.
- 27. Affine vs. Nonaffine Deformations in Semiflexible Polymer Networks New England Statistical Physics Meeting, Brandeis University. October 25, 2003.
- 28. Affine vs. Nonaffine Deformations in Semiflexible Polymer Networks Physics Department Seminar, Harvard University. October 21, 2003.
- 29. Affine vs. Nonaffine Deformations in Semiflexible Polymer Networks New England Complex Fluids Workshop, Brandeis University. September 17, 2003.
- 30. Affine vs. Nonaffine Deformations in Semiflexible Polymer Networks ASTATPHYS-MEX-2003, Puerto Vallarta, Mexico. August 27, 2003.
- 31. Affine vs. Nonaffine Deformations in Semiflexible Polymer Networks Lans en Vercors, Biophysics Jam Sessions. August 7, 2003.
- 32. Affine vs. Nonaffine Deformations in Semiflexible Polymer Networks Sandia National Laboratories Seminar. July 17, 2003.
- 33. Affine vs. Nonaffine Deformations in Semiflexible Polymer Networks Materials Research Laboratory, UCSB. July 2, 2003.

- 34. Affine vs. Nonaffine Deformations in Semiflexible Polymer Networks Associative Networks Meeting at Polymer Science, University of Massachusetts, Amherst sponsored by NSF-MRSEC. May 14, 2003.
- 35. Fluctuation Effects in Biology Electrical Engineering Department Seminar, University of Massachusetts, Amherst April 18, 2003.
- 36. Affine vs. Nonaffine Deformation in Semiflexible Networks MIT Applied Math Seminar, April 15, 2003.
- 37. The worm turns: The helix-coil worm-like chain as a model  $\alpha$ -helix Cal Tech Division of Applied Physics January 31, 2003.
- 38. The worm turns: The helix-coil worm-like chain as a model  $\alpha$ -helix Complex Systems Seminar, Vrije Universiteit Amsterdam November 5, 2002.
- 39. Microrheology in two and three dimensions, Colloquium at the Jožef Stefan Institute, Ljubljana, Slovenia. December 2001.
- 40. Microrheology in two and three dimensions, Colloquium at Technion, Israel Institute of Technology, Haifa, Israel. November 2001.
- 41. Microrheology in two and three dimensions, Seminar at The Weizmann Institute of Science, Rehovot, Israel. November 2001.
- 42. Microrheology in two and three dimensions, UCLA Physics Department Condensed Matter Journal Club, Los Angeles, CA, USA. October 2001.
- 43. What is Being Measured in Microrheology Experiments?, Colloquium at Indiana University Physics Department, Bloomington, IN, USA. September 2001.
- 44. What is Being Measured in Microrheology Experiments?, Condensed Matter Seminar at University of California at Irvine, Irvine, CA, USA. June 2001.
- 45. What is Being Measured in Microrheology Experiments?, Theoretical Condensed Matter Seminar, Cambridge University, Cambridge, UK. April 2001.
- 46. What is Being Measured in Microrheology Experiments?, Dutch Royal Society, Amsterdam, NL. April 2001.
- 47. What is Being Measured in Microrheology Experiments?, Symposium on Soft Matter as a Nonlinear Science sponsored by CCCNS, CNLS, and UCI, Laguna Beach, CA. February 2001.
- 48. What is Being Measured in Microrheology Experiments?, LRSM Symposium on "The Interface on Between Biology & Materials Science", The University of Pennsylvania, PA, USA. November 2000,
- 49. What is Being Measured in Microrheology Experiments?, Virgina Tech University, Blacksburg, VA. October 2000.
- 50. What is Being Measured in Microrheology Experiments?, Polymer Science Forum Seminar, ExxonMobil Research & Engineering Co. July 2000,
- 51. What is Being Measured in Microrheology Experiments?, Seminar at Yale University, Department of Mechanical Engineering, New Haven, CT. June 2000.
- 52. What is Being Measured in Microrheology Experiments?, Complex Fluids Seminar at Princeton University, Princeton, NJ.May 2000.
- 53. What is Being Measured in Microrheology Experiments?, Condensed Matter Seminar at Brown University, Providence, RI. April 2000.
- 54. Screened and Unscreened Phases in Sedimenting Suspensions, Physics Department Colloquium at Georgetown University, Washington DC. March 2000.

- 55. Sedimentation: Physics Far from Equilibrium, Physics Department Colloquium at the University of Western Ontario, London, Ontario, Canada. February 2000.
- 56. Sedimentation: Physics Far from Equilibrium, Physics Department Colloquium at the University of Missouri, Rolla, MO. February 2000.
- 57. Screened and Unscreened Phases in Sedimenting Suspensions, Meeting of the American Physical Society, Atlanta GA. March 1999.
- 58. Screened and Unscreened Phases in Sedimenting Suspensions, Institut für Theoretische Physik, Physik-Department der Technischen Universität München, D-85747 Garching, Germany. May 1997.
- 59. Screened and Unscreened Phases in Sedimenting Suspensions, Gordon Conference in Il Cicco Italy. May 1997.
- 60. Theory of Fluctuation-Enhancement in Sedimenting Colloids, Meeting of the American Physical Society, St. Louis, MO. March 1996.

### $Contributed\ Talks$

- Nematic Elastomers and the Red Blood Cell, Meeting of the American Physical Society, Seattle, WA. March 2001.
- What is Being Measured in Microrheology Experiments?, Meeting of the American Physical Society, Minneapolis, MN. March 2000.
- Boundary Effects in Chiral Polymer Hexatics, Meeting of the American Physical Society, Minneapolis, MN. March 2000.
- How Sand Castles Fall: The Stability of Cohesive Sandpiles, Meeting of the American Physical Society, Los Angeles, CA. March 1998.
- Star Polymers and the Failure of Time-Temperature Superposition, Meeting of the American Physical Society, Los Angeles, CA. March 1998.
- Screened and Unscreened Phases in Sedimenting Suspensions, Meeting of the American Physical Society, Los Angeles, CA. March 1998.
- Bubble Flow Instabilities, Meeting of the American Physical Society, Kansas City, MO. March 1997.
- Non-Equilibrium Fluctuations in Sedimenting Suspensions: A Dynamical Renormalization Group Theory, Meeting of the American Physical Society, Kansas City, MO. March 1997.
- Sedimentation and the KPZ Equation, Meeting of the American Physical Society, San Jose, CA. March 1995.
- Sedimentation and the KPZ Equation with Colored Noise, Informal Theory Seminar at AT&T Bell Laboratories, September 1995.

# Meetings Organized\_

- Session Organizer for "Gordon Conference on Theoretical Biology and Biomathematics" June 2006.
- Program Organizer for the 19<sup>th</sup> New England Complex Fluids Workshop held at the University of Massachusetts, Amherst on 28, June 2004. co-Organiziers: Maria Santore (Polymer Science) and Anthony Dinsmore.
- Technical Program Organizer for "Local probes of rheology and structure" at the 73<sup>rd</sup> Annual Meeting of the Society of Rheology. Co-Organizer: Thomas Mason.

## $Professional \ Association \ Memberships\_$

- American Physical Society
- Materials Research Society
- Society of Rheology

- Invited Participant for: Workshop on the Role of Theory in Biological Physics (Sponsored by the National Science Foundation).
- Reviewer for:
  - Biophysical Journal
  - Physical Review Letters
  - Physical Review E
  - European Journal of Physics
  - Europhysics Letters
  - Journal of Fluid Mechanics
  - Macromolecules

# $References\_$

Professor Tom C. Lubensky Mary Amanda Wood Professor of Physics

Department of Physics and Astronomy, phone: (215) 898-7002 University of Pennsylvania fax: (215) 898-2010

209 South 33<sup>rd</sup> St. e-mail: tom@dept.physics.upenn.edu

Philadelphia, PA 19104

Professor Philip A. Pincus Professor

Department of Physics and Materials Research Laboratory, phone: (805) 893-4685 University of California, Santa Barbara fax: (215) 893-8797 Santa Barbara, CA 93106 e-mail: fyl@mrl.ucsb.edu

Professor Fred C. MacKintosh Professor of Theoretical Soft Matter and Complex Systems

Division of Physics & Astronomy

Vrije Universiteit

De Roelelaan 1081

phone: +31 20 444-7857

fax: +31 20 444-7992

e-mail: fcm@nat.yu.nl

De Boelelaan 1081 e-mail: fcm@nat.vu.nl Amsterdam, NL – 1081 HV

The Netherlands

Dr. Gary S. GrestSenior Staff PhysicistSandia National Laboratoriesphone: (505) 844-3261

PO Box 5800 fax: (505) 844-9781 Albuquerque, NM 87123-1411 e-mail: gsgrest@sandia.gov

Professor Michael Rubinstein J. Ross MacDonald Professor of Chemistry

Department of Chemistry phone: (919) 962-3544
Campus Box 3290 fax: (919) 962-9312
Venable and Kenan Laboratories

Venable and Kenan Laboratories e-mail: mr@unc.edu

The University of North Carolina at Chapel Hill

Chapel Hill, NC 27599-3290

Professor David A. Weitz Gordon McKay Professor of Applied Physics & Professor of Physics

Department of Physics phone: (617) 496-2842
Harvard University e-mail: weitz@deas.harvard.edu

29 Oxford Street Cambridge, MA 02138

Professor Ken A. Dill Professor of Biophysics & Associate Dean of Research

Department of Pharmaceutical Chemistry
University of California, San Francisco
mboxphone: (415) 476-9964
mboxphone: (415) 502-4222
e-mail: dill@maxwell.ucsf.edu

San Francisco, CA 94143-2240

Professor David G. GrierProfessorDepartment of Physics & Center for Soft Matter Researchphone: (212) 998-3713New York Universityfax: (212) 995-4016

4 Washington Place New York, NY 10003

Professor Leslie Wilson Professor

Department of Molecular, Cellular,
& Developmental Biology

The University of California at Santa Barbara

phone: (805) 893-2819

fax: (805) 893-8044

e-mail: wilson@lifesci.ucsb.edu

Santa Barbara, CA 93106

Dr. Scott T. Milner

Staff Physicist

Corporate Research Science Laboratories phone: (908) 730-2309
Exxon Research and Engineering Company fax: (908) 730-2536
Route 22E e-mail: stmilne@erenj.com

Annandale, NJ 08801

Professor Robijn Bruinsma Professor

Department of Physics & Astronomy phone: (310) 825-8539 University of California at Los Angeles fax: (310) 206-5668

405 Hilgard Ave. e-mail: bruinsma@physics.ucla.edu

Los Angeles, CA 90095

Professor Michael Thorpe Foundation Professor

Department of Physics & Astronomy phone: (480) 965-3085
Department of Chemistry & Biochemistry Bateman Physical Sciences PSF 359

phone: (480) 965-3085
fax: (775) 599-7188
e-mail: mft@asu.edu

Arizona State University Tempe, AZ 85287-1504

Professor Sriram Ramaswamy Professor

Department of Physics, phone: +91 80 334 2581
Indian Institute of Science, fax: +91 80 334 1683

Bangalore 560 012 e-mail: sriram@physics.iisc.ernet.in

 $\operatorname{India}$ 

Professor Randall D. Kamien William Smith Term Professor of Physics and Astronomy

Department of Physics and Astronomy, phone: (215) 898-5940 University of Pennsylvania fax: (215) 898-2010

209 South 33<sup>rd</sup> St. e-mail: kamien@dept.physics.upenn.edu

Philadelphia, PA 19104

e-mail: david.grier@nyu.edu