101ST STATISTICAL MECHANICS CONFERENCE
RUTGERS UNIVERSITY, BUSCH CAMPUS, HILL CENTER, ROOM 114
SUNDAY, MONDAY, TUESDAY, MAY 10-12, 2009

PROGRAM OF THE 101ST STATISTICAL MECHANICS CONFERENCE

SUNDAY, MAY 10, 2009

8:00 – 9:00 Registration and breakfast

9:00 – 9:25 M. Schechter, University of British Columbia
Low temperature universality in disordered solids

9:25 - 9:50 N. Andrei, Rutgers University
Quantum Impurities out of Equilibrium

9:50 – 10:15 G. Montambaux, Universite Paris-Sud, CNRS
Quantum transport and Aharonov-Bohm effect in diffusive networks

10:15 – 10:40 G. Schoen, Universitat Karlsruhe
Single-electron tunneling and fluctuation theorem

10:40 – 11:10 COFFEE

11:10 – 11:35 D.J. Scalapino, University of California, Santa Barbara
A twisted ladder: relating the Fe superconductors to the the high Tc cuprates

11:35 – 12:00 P. Woelfle, Universitat Karlsruhe
Transport through a barrier embedded in a Luttinger liquid: nonuniversal scaling at strong coupling

12:00 – 12:25 S. Kais, Purdue University
Finite Size Scaling in Quantum Mechanics

12:25 – 1:45 LUNCH

1:45 – 2:10 G. Falkovich, Weizmann Institute
Symmetries of turbulent state

2:10 - 2:35 A. Kapitulnik, Stanford University
Recent results on the Superconductor-Insulator transition

2:35 – 3:00 A. Yacoby, Harvard University
Coherent Control of Two-Electron Logical Spin Qubits

3:00 – 3:25 I. M. Sigal, University of Toronto
On Quantum Decoherence

3:25 - 3:55 COFFEE

3:55 – 4:20 T. Spencer, Institute for Advanced Study
Diffusion in a 3D SUSY hyperbolic sigma model

4:20 – 4:45 B. Nachtergaele, University of California, Davis
Applications of Lieb-Robinson bounds

4:45 – 5:10 J. Weeks, University of Maryland
Competition between local hydrogen-bonding and long-ranged dipolar forces in water

5:10 – 5:35 F. Stillinger, Princeton University
Modeling Prebiotic Appearance of Biological Chirality

5:35 – 6:00 M. Widom, Carnegie Mellon
Folding of riboswitches during RNA transcription

6:00 - 8:00 COCKTAILS AND CONCERT IN HONOR OF YOSEPH (JOE) IMRY AT THE FIBER OPTICS AUDITORIUM. SPONSORED BY SPRINGER, PUBLISHER OF THE JOURNAL OF STATISTICAL PHYSICS AND COMMUNICATIONS IN MATHEMATICAL PHYSICS. ALL ARE INVITED.

THE CONCERT WILL BE GIVEN BY JANICE LAMARRE (http://www.janicelamarre.com)

8:00 - BANQUET WILL BE HELD AT THE BUSCH FACULTY DINING ROOM. ADVANCED RESERVATIONS ARE REQUIRED

SEE MAP FOR DIRECTIONS: http://maps.rutgers.edu/maps/default.aspx?preadj=true&campus=4?1326,322.

MONDAY, MAY 11, 2009

8:30 – 8:30 Registration and breakfast

8:30 – 10:00 Short talks, Session A

10:00 – 10:30 COFFEE

10:30 – 10:55 B. Schmittman, Virginia Tech.
Consensus formation in social networks

10:55 – 11:20 S. Solla, Northwestern University
Statistical physics, Bayesian inference, and neural information processing

11:20 - 11:55 M. Magnasco, Rockefeller University
Self-tuned critical networks

11:55 – 12:30 Human rights session (With J. Lebowitz and others)

12:30 – 2:00 LUNCH

2:00 – 2:25 J. Harris, Yale University
New measurements of persistent currents in normal metal rings

2:25 – 2:50 J. Langer, University of California, Santa Barbara
Effective Disorder Temperature and Nonequilibrium Thermodynamics of Amorphous Materials

2:50 – 3:15 P. Cvitanovich, Georgia Tech.
Geometry of Turbulence: A Stroll Through 61,506 Dimensions

3:15 – 3:40 D. Ruelle, IHES, France
Linear Response for General Smooth Dynamical Systems

3:40 – 4:10 COFFEE

4:10 – 4:35 D. Hone, Kavli Institute for Theoretical Physics, UCSB
Statistical Mechanics of Floquet Systems

4:35 – 5:00 A. Sengupta, Rutgers University
Action at a Distance in Eukaryotic Gene Regulation

5:00 – 5:25 R. Levy, Rutgers University
Exploring landscapes for protein folding, binding, and fitness

5:25 – 5:50 R. Livi, Instituto Nazionale di Fisica Nucleare (INFN)
Multiple timescales in a model for DNA denaturation dynamics

5:50 – 8:00 Cocktails and dinner

8:00 – 8:40 J. Beck, Rutgers University
Randomness in mathematics

8:40 – 9:20 D. Ruelle, IHES, France
Randomness in nature

TUESDAY, MAY 12, 2009

8:00 – 8:00 Registration and breakfast

8:00 – 9:30 Short talks, Session B

9:30 – 10:00 COFFEE

10:00 – 10:25 K. Moler, Stanford University
Persistent Currents in Gold Rings

10:25 – 10:50 D. Huse, Princeton University
Strongly-correlated cold atomic Fermi gas

10:50 – 11:15 A. Middleton, Syracuse University
Simulating Dynamics in Glassy Models Using Exact Sampling

11:15 - 11:40 G. Kozma, Weizmann Institute
Geometric scale-free graphs

11:40 – 12:05 D. Abraham, University of Oxford
Ising Strips, Confinement and all that

12:05 – 12:30 F. Wu, Northeastern University
Lattice statistics on kagome-type lattices

12:30 – 1:50 LUNCH

1:50 – 2:15 G. Caginalp, University of Pittsburgh
Phase Field Equations: The Next Generation

2:15 – 2:40 C. Villani, UMPA, Ecole Normale Superieure de Lyon/IAS
Landau Damping

2:40 – 3:05 S. Olla, Universite de Paris – Dauphine
From microscopic Hamiltonian dynamics to heat equation: a weak coupling approach

3:05 – 3:30 T. Bodineau, Ecole Normale Superieure
Current large deviations for dissipative dynamics

3:30- INFORMAL DISCUSSION