**Interactions and Chaos in Mesoscopic Systems**

**May 12-14, 2000**

**Friday, May 12**

Humphrey Room, Radisson Hotel Metrodome

8:15 - 9:00 a.m.  
Registration

9:00 - 9:05 a.m.  
Welcome

9:05 - 9:40 a.m.  
Bertrand Halperin, Harvard University  
“Ground-State Spin Configurations in Nanoparticles and Nanotubes”

9:40 - 10:15 a.m.  
David Goldhaber-Gordon, Harvard University  
“Spin Configuration of Quantum Dot Ground States”

10:15 – 11:00 a.m.  
Coffee Break

11:00 - 11:35 a.m.  
Piet Brouwer, Cornell University  
“Fluctuating Spin g-tensor in Small Metal Grains”

11:35 - 12:10 p.m.  
Dan C. Ralph, Cornell University  
“Interacting-Electron States inside Ferromagnetic and Superconducting Particles”

12:10 - 2:00 p.m.  
Lunch, Nolte and Northrop Rooms, Radisson Hotel Metrodome

**Afternoon session**

Humphrey Room, Radisson Hotel Metrodome

2:00 – 2:35 p.m.  
Marc Kastner, Massachusetts Institute of Technology  
“Kondo and Fano Line Shapes in the Conductance of Single Electron Transistors”

2:35 – 3:10 p.m.  
Leo Kouwenhoven, Technical University Delft  
“New Results on the Kondo Effect in Quantum Dots and Rings”

3:10 – 3:40 p.m.  
Coffee Break

3:40 - 4:15 p.m.  
Philippe Jacquod (for Doug Stone), Yale University  
“Suppression of Ground-State Magnetization Due to Interaction Fluctuations”

4:15 - 4:50 p.m.  
Charlie Marcus, Stanford University  
“Mesoscopics with Spin”

4:50 – 5:25  
Albert Chang, Purdue University  
“Transport Investigations of Small GaAs/Al[x]Ga[1-x]As Quantum Dots”

**Saturday, May 13**

Humphrey Room, Radisson Hotel Metrodome
9:00 - 9:35 a.m.  Mike Tinkham, Harvard University  
“Quantum Suppression of Superconductivity in Ultrathin Nanowires”

9:35 – 10:10 a.m.  John Clarke, Lawrence Berkeley National Laboratory  
“The Effects of Dissipation on Quantum Fluctuations in Small Junctions”

10:10 - 10:40 a.m.  Coffee Break

10:40 – 11:15 a.m.  Anton Andreev, University of Colorado  
“Coulomb Blockade Oscillations in the Thermopower of Open Dots”

11:15 - 11:50 a.m.  Igor Aleiner, SUNY, Stony Brook  
“Mesoscopic Fluctuations of Coulomb Drag”

11:50 – 2:00 p.m.  Lunch, Nolte and Northrop Rooms, Radisson Hotel Metrodome

**Afternoon Session**  Humphrey Room, Radisson Hotel Metrodome

2:00 - 2:35 p.m.  Charlie Kane, University of Pennsylvania  
“Electronic Transport in Carbon Nanotubes”

2:35 – 3:10 p.m.  Paul L. McEuen, UC Berkeley  
“Carbon Nanotubes - a (Nearly) Ideal 1D Conductor”

3:10 - 3:45 p.m.  Leon Balents, UC Santa Barbara  
“Spin and Charge Transport in Carbon Nanotubes”

3:45 – 4:15 p.m.  Coffee Break

4:15 - 4:50 p.m.  Uri Sivan, Technion, Israel  
“1D Crystallization of Positively Charged Colloids on DNA - Low Temperature Physics at Room Temperature”

4:50 – 5:25 p.m.  Alexander van Oudenaarden, Massachusetts Institute of Technology  
“Brownian Ratchets and Stochastic Phenomena in Biology”

**Sunday, May 14**  Humphrey Room, Radisson Hotel Metrodome

9:00 - 9:35 a.m.  Boris Shklovskii University of Minnesota  
“Screening of a Macroion by Multivalent Ions: Correlation Induced Charge Inversion”

9:35 – 10:10 a.m.  Yoram Alhassid, Yale University  
”Interaction Effects on the Conductance Peak Fluctuations in Quantum Dots”

10:10 - 10:40 a.m.  Coffee Break

10:40 – 11:15 a.m.  Yuval Gefen, Institute for Advanced Study, Princeton
“Scrambling of Electrons in Quantum Dots and the Anderson Orthogonality Catastrophe”

11:15 - 11:50 a.m. Harold Baranger, Duke University
“Kinks in Coulomb-Blockade Peak Positions: Theory and Experiment”