

"Electronic and Magnetic Properties of Chiral Structures and their Assemblies"

Telluride Intermediate School, 725 West Colorado Ave, Telluride CO

06/26/2012 - 06/30/2012

Tuesday June 26

0700-0730 Check-in, get badges, at meeting location

0730-0830 Catered breakfast at TSRC

0830-0850 Introduction

Chair: D. Waldeck

0850-0930 Nitzan-"Circular currents and magnetic field effects in molecular junctions involving molecular rings".

0930-1010 Mujica- Chiral molecular films as electron polarizers and polarization modulators

1010-1040 Coffee

1040-1120 Tamar Seidman- Tuning molecular chirality with light

1120-1200 Zeev Vager- Spin order without magnetism -a new phase of spontaneously broken symmetry

1200-1240 Discussion

1240-1400 Catered Lunch at TSRC

1400-1440 Zacharias-Electron spin filter action in helical molecules

1440-1520 Rafael Gutierrez- Spin selective transport through helical molecular systems

1520-1550 Coffee break

1550-1630 Martin Quack-- 'Recent progress on parity violation and stereomutation dynamics in chiral molecules'

1630-1730 Discussion

1800-1915 TSRC Town Talk, Palm Theatre, James Skinner, Title TBA

1945 A group Dinner

Wednesday June 27

Morning free for hike

Chairman: Mike Therien

1300-1340 Andy Gelman-Super-enantiospecific surface chemistry from non-linear kinetics processes

1340-1420 Carmen Herrmann-"Designing electronic communication in functional magnetic

molecules".

1420-1500 Yunjie Xu-"Spectroscopic studies of solvation of chiral molecules: from the gas phase to solution".

1500-1530 Coffee break

1530-1610 April Brown-"DNA interactions with InAs Surfaces: Chemistry, Conformation, and Interfacial Electronic Properties"

1610-1650 Erin Iski+Esmeralda Yitamben-"Tailoring Surfaces with Hierarchical Chiral Self-assembly of Amino Acids".

1650-1730 Karl-Heinz Ernst-"Inelastic electron tunneling induced surface dynamics: switching handedness and unidirectional motion"

1730-1800 Discussion

Dinner on your own or with colleagues

Thursday June 28

Chairman: David Beratan

0730-0830 Catered breakfast at TSRC

0830-0910 Cathalina Achim-Functional chiral nanostructures based on nucleic acids

0910-0950 Yossi Paltiel- Spin filter and spin memory devices using simple Si based technology and chiral molecules.

0950-1010 Richard Rosenberg-"Search for spin polarization effects in the transmission of high energy (50-900 eV) electrons through chiral overlayers." (short talk)

1010 -1040 Coffee break

1040-1120 Ron Naaman- Spin selective transport through chiral molecules

1120-1200 Charlie Sykes-"Effects of Chirality in Electron Tunneling, Molecular Excitation and Rotation"

1200-1230 Discussion

1230-1400 Lunch on your own or with colleagues

1400-1440 Mike Therien- "Electro-Optic Properties of Single Wall Carbon Nanotubes Wrapped by Helically Chiral Semiconducting Polymers

1440-1520 Mikko Huttunen- Absolute Nonlinear Optical Probes of Chirality

1520-1550 Coffee break

1550-1630 Patrick Vaccaro- "Intrinsic Electronic Optical Activity: The Long and Arduous Road to Solvation"

1630-1710 Jochen Autschbach- "Calculation of electronic optical activity with Time-dependent DFT. Some theory, some applications"

1710-1740 Discussion

1800 TSRC picnic, rain or shine, on the grassy area of Telluride Lodge; families welcomed free of charge

Friday June 29

Free morning for hiking

Chairman: Ron Naaman

1300-1340 J. K. McCusker- "Spin and Spin Polarization Effects on Photo-induced Dynamics"

1340-1420 Shahal Ilani- "Measuring the quantum states of few electrons in carbon nanotubes"

1420-1500 Thierry Verbiest- Nonlinear optical properties of chiral systems

1500-1530 Coffee break

1530-1610 G. Finkelstein- Resonant tunneling in dissipative environment

1610-1650 Gemma Solomon- "Mapping electron transport pathways in complex systems"

1650-1730 Uri Peskin- Electron transport in DNA.

1730-1810 David Beratan, Ravi Venkatramani, and Peng Zhang- Energy and charge flow in electron transfer reactions

1810-1830 Discussion.

Dinner on your own or with colleagues

Saturday June 30

0730-0830 Catered breakfast at TSRC

0830-1030 Discussion

Free for additional discussions.