



# Condensed Matter Theory Center

## 2011 Fall Symposium

October 3 & 4, 2011  
2205 Physics Building

<http://www.physics.umd.edu/cmtc/seminars.html>

### **Monday, October 3 Afternoon Session: 2-5:30pm**

David Abergel	"Charged impurity disorder in bilayer graphene"
Eddy Barnes	"Master equation approach to the central spin decoherence problem"
Ryan Barnett	"Order by disorder in spin-orbit coupled BECs"
Lev Bishop	"Chirped pulses for qubit readout in circuit QED"
Greg Boyd	"Detecting D-Wave Pairing and Collective Modes in Fermionic Condensates with Bragg Scattering"
Benjamin Fregoso	"Degenerate Floquet systems: theory and applications"
Jason Kestner	"Screening of charged impurities with multi-electron singlet-triplet spin qubits in quantum dots"

### **Tuesday, October 4 Morning Session: 9am-12noon**

Qiuzi Li	"Theory of 2D transport in graphene for correlated disorder"
Xiong-Jun Liu	"Irrationally quantized charge excitation in superconductor-semiconductor heterostructures"
Alejandro Lobos	"Linear Josephson junction arrays capacitively coupled to diffusive metals: prediction of a SC-insulator transition tuned with dissipation"
Sergey Pershoguba	"Shockley-model description of the edge states in topological insulators"
Stephen Powell	"Higgs transitions of spin ice"
Juraj Radic	"Vortices in spin-orbit-coupled Bose-Einstein condensates"

### **Tuesday, October 4 Afternoon Session: 2-5:30pm**

Chien-Hung Lin	"Stabilizing topological phases using periodically time-dependent perturbations: interaction induced decay of Floquet Majorana fermions"
Rajdeep Sensarma	"Dynamics with Cold Atoms: Near and Far from Equilibrium"
Kai Sun	"Topological Flat-Band and Fractional Quantum Hall Effects without Landau Levels"
Sunny Xin Wang	"Mottness and magnetism of fermions in a double-well optical lattice"
Shuo Yang	"Compressible and incompressible phases in lattice fractional quantum Hall systems"
Euyheon Hwang	"Plasmons and Coulomb drag in double layer graphene"
John Biddle	"Spin in the 5/2 filled quantum hall state"

(Talks are 30 minutes)