

Chez Pierre

Presents ...

Monday, November 24, 2008

1:00pm

MIT Room 4-331



Eva Andrei

Rutgers University

“Charge carriers in Graphene seen through transport and tunneling experiments”

Graphene, a one-atom thick layer of crystalline carbon possesses extraordinary electronic properties which make it a prime candidate for novel nano-electronic devices, at the same time raising the prospect to observe phenomena hitherto unseen in bench top experiments. These unusual properties are due to quasiparticle excitations that mimic massless Dirac fermions. I will present scanning tunneling microscopy and transport experiments that provide access to these quasiparticles giving insight into their motion, the impact of magnetic field and the effects of interactions.