

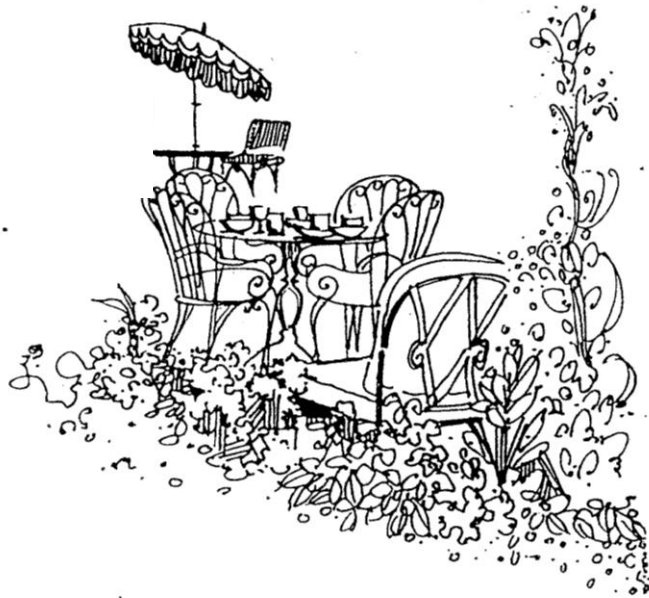
Chez Pierre

Presents ...

Monday, November 14, 2011

12:00pm

MIT Room 4-331



Allan MacDonald
University of Texas - Austin

“Spontaneous Hall Effects in Bilayer Graphene”

Neutral bilayer graphene is a gapless semiconductor with a large density of states at energies close to the Fermi energy. I will discuss the broken symmetry states that occur in this system both in the presence and in the absence of an magnetic field with an emphasis on the role of the layer pseudospin degree of freedom.

In the absence of a magnetic field, the quasiparticles of the broken symmetry states have large momentum space Berry curvatures that provide an experimental realization of the quantized anomalous Hall effect.