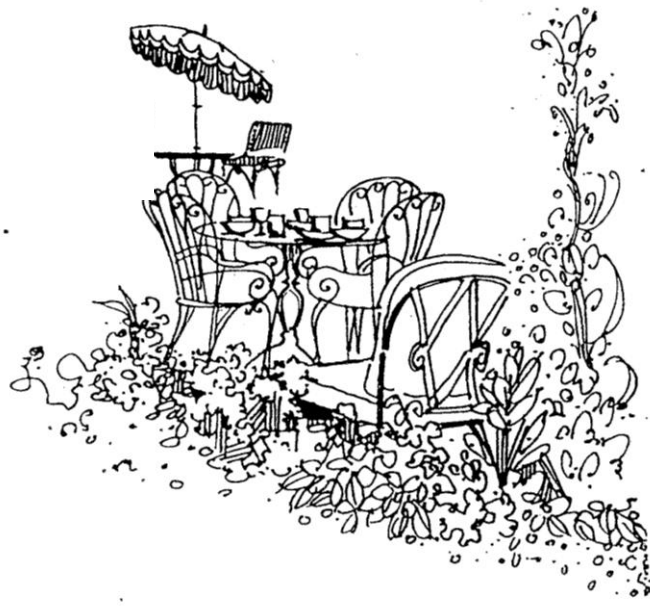
Chez Pierre

Presents ...

Monday, April 9, 2012
12:00pm
MIT Room 4-331



Ashvin Vishwanath

University of California - Berkeley

"Topological Phases is Correlated Solids: From Iridates to Strained Graphene"

I will discuss realization of novel topological phases in correlated systems. These include Weyl semimetals, which exhibit unusual 'Fermi arc' surface states and their possible realization in a family of Iridates with pyrochlore structure. Also, the possibility of topological superconductivity on doping a honeycomb lattice Iridate material will be considered. Finally, we discuss prospects for realizing fraction topological insulators in graphene under strain, where psuedo-Landau levels have been experimentally observed even at zero magnetic field.