

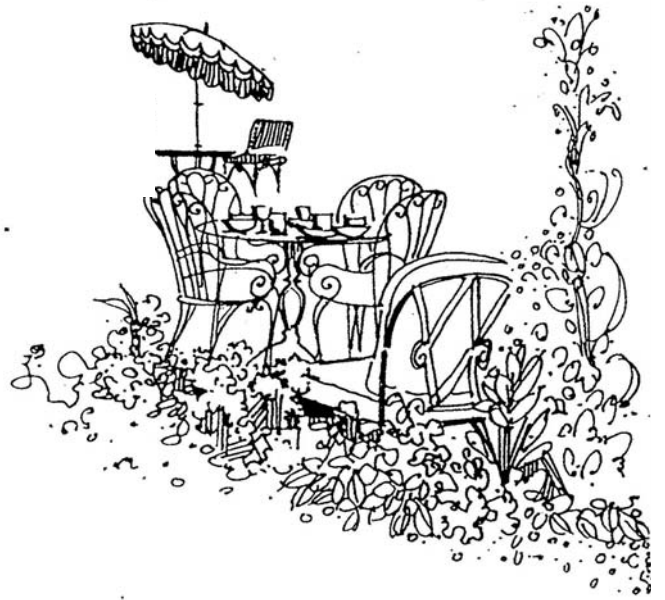
Chez Pierre

Presents ...

Monday, November 16, 2009

12:00pm

MIT Room 4-331



Mansour Shayegan
Princeton University

"Composite Fermions with a Valley Degree of Freedom"

Two-dimensional (2D) electrons confined to AlAs quantum wells occupy two conduction band valleys with elliptical Fermi contours, and the occupation of these valleys can be controlled via the application of in situ uni-axial, in-plane strain. In this presentation, I will highlight some of our latest studies of AlAs 2D electrons at high magnetic fields and as a function of strain where the valley degree of freedom dramatically manifests itself in the properties of the interacting system.