Speaker: Jainendra Jain (Penn State)

Title: 25 Years of Composite Fermions

Abstract: The fractional quantum Hall effect is one of the most amazing emergent phenomena resulting from interactions. Many of its features are securely understood in terms of topological particles called composite fermions, which are bound states of electrons and quantized vortices. After a review of composite fermions and their defining features, I will report on recent progress on subtle phenomena that arise from a weak residual interaction between composite fermions, with include paired states, fractional quantum Hall states, spin physics, and quantum crystals of composite fermions.

Host: Sankar Das Sarma

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