HAO Colloquium Series
(Refreshments will be served)

Speaker: Phil Armitage, JILA, University of Colorado, Boulder

Date: Wednesday, September 24, 2014

Time: 1:30–2:30 pm

Location: CG1 – South Auditorium
(Also webcast at http://www.fin.ucar.edu/it/mms/cg-live.htm)

Title: Turbulence in Planet Formation

Abstract:
Turbulence within gaseous protoplanetary disks is thought to be responsible for the diffusion and concentration of solid material during the early phases of planet formation. The origin and nature of this turbulence is debated, but magnetohydrodynamic instability of shear flow appears to be the best candidate. I will discuss our efforts to numerically simulate non-ideal MHD turbulence in the extremely weakly ionized environment of protoplanetary disks, along with the consequences of our results for planet formation.