



## HAO Colloquium Series

(Refreshments served)

***Speaker:*** Philip Judge—HAO/NCAR

***Time:*** 1:30 pm

***Date:*** Wednesday, February 16, 2011

***Location:*** CG-1, South Auditorium

***Title:*** This is the dawning of the age of the chromosphere

***Abstract:*** I will argue that we must redouble efforts to understand the solar chromosphere, by discussing two particular problems: the measurement of the free energy in the solar atmosphere, and the supply of mass, momentum and energy into the corona and wind. I will draw upon spectropolarimetric data from NSO's IBIS and FIRS instruments. If we are serious about trying to understand the origins of Space Weather and of the variable solar UV radiation, we must begin to measure the storage and release of magnetic energy in the Sun's atmosphere. To this end I will argue that imaging spectropolarimeters operating at infrared wavelengths offer our best shot for the foreseeable future, at a reasonable cost. Such instruments can in principle fill a gaping hole left by expensive spacecraft instruments, which I believe only measure the effects, not causes, of geo-effective solar activity.