HAO Colloquium Series, CGD, and ACD
(Refreshments will be served)

Speaker: Ricky Egeland, HAO/MSU
Date: Wednesday, March 18, 2015
Time: 1:30–2:30 pm
Location: CG1-S. Auditorium
(Also webcast at https://ucarconnect.ucar.edu/live?room=cg1aud)

Title: Century-Long Monitoring of Solar Irradiance and Earth's Albedo Using a Stable Scattering Target in Space

Abstract:
An inert sphere of a few meters diameter, placed in a special stable geosynchronous orbit in perpetuo, can be used for a variety of scientific experiments. Ground-based observations of such a sphere, "GeoSphere," can resolve very difficult problems in measuring the long-term solar irradiance. GeoSphere measurements will also help us understand the evolution of Earth's albedo and climate over at least the next century. I will review the high-precision solar and stellar measurements that motivate the case for GeoSphere, as well as the expected scientific results and technical challenges for this proposed experiment.