HAO Colloquium Series

Speaker: Richard Morton, University of North Umbria (UK)
Time: 3:00–4:00 pm
Date: Wednesday, July 2, 2014
Location: CG1 – 2126 (also webcast at http://www.fin.ucar.edu/it/mms/cg-live.htm)
Title: Energy transport by kink waves in the solar atmosphere

Abstract:

MHD waves can play an important role in the transport of energy around the solar atmosphere. In particular, low frequency incompressible waves are very effective at transporting energy due to known difficulties associated with dissipationing the mechanical energy at these scales. Recent observations have shown evidence for low-frequency incompressible kink wave motions throughout the solar atmosphere. I will discuss these observations, focusing particularly on recent results from ROSA at the Dunn Solar Telescope, Hinode, SDO and Hi-C. Further, I will put forward some ideas about the role incompressible kink waves play in energy transfer in the chromosphere and corona and the implications of these ideas with respect to the long standing problem of heating the atmospheric plasma.