Speaker: Alina Donea, Monash University

Time: 1:30–2:30 pm

Date: Wednesday, May 21, 2014

Location: CG1 – 2139 Captain Mary (No webcast or recording will be available for this presentation)

Title: Do we understand sunquakes?

Abstract:
Solar flares produce seismic waves in the Sun's interior that closely resemble those created by earthquakes on our planet. In this talk I will describe properties of some spectacular solar quakes and their seismic sources. I will relate these to multi-wavelength observations of the flares that generated them. I will emphasize how important it is now to understand the role of the chromosphere in generating these phenomena. Terminology such as "acoustic dead beats", "seismic ripples on the sun", "seismic power maps", "acoustic transients", "sudden photospheric responses", "Lorentz forces" and "particle beam momenta" along with observational evidence from multiple instruments such as HMI and AIA /SDO, RHESSI, STEREO, FIRS and many others, are a few of the interesting aspects of our work which I will mention.