



HAO Colloquium Series

(Refreshments served)

Speaker: Jonathan Cirtain, NASA/MSFC

Time: 1:30–2:30 pm

Date: Wednesday, February 29, 2012

Location: CG1-2126

Title: The Solar Instrumentation and Technology Development Programs at Marshall Space Flight Center and What can we learn about the solar dynamo from polar coronal bright points?

Abstract:

Within the past four years a substantial number of new instrument development and technology demonstration programs have been initiated at MSFC/NASA. MSFC has over 30 years experience in the development of magnetograph and spectropolarimetry instruments, and we have recently extended the instrumentation focus to include EUV and x-ray imaging spectroscopy, EUV sub arcsecond resolution imaging, and in situ plasma physics. These science and technology goals for each program will be introduced.

Following the instrumentation overview, an introduction on the use of polar coronal bright points as a tracking mechanism of flux emergence and its relationship to the global solar cycle will be provided. Recent observations of the polar coronal hole using XRT/Hinode, AIA/SDO and photospheric measurements of the magnetic field can be used to analyze the correspondence in flux emergence and subduction in the polar regions as compared to the active latitudes.