



ASTROPHYSICS SEMINAR SERIES

"The Stratospheric Observatory for Infrared Astronomy: Status and Recent Science Highlights"

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Monday, November 12, 2012
Refreshments at 3:30pm in CAS 500
Talk begins at 4:00pm in CAS 502

Abstract:

The Stratospheric Observatory for Infrared Astronomy (SOFIA) is a 2.5-meter infrared airborne telescope in a Boeing 747SP that operates in the stratosphere at altitudes as high as 45,000 feet (14 km). A joint project of NASA and the German Aerospace Center (DLR), SOFIA can conduct photometric, spectroscopic, and imaging observations at wavelengths from 0.3 micron to 1.6 millimeters with an average atmospheric transmission greater than 80 percent across that range. The first-generation instruments span the range from 0.3 to 240 microns (1.25 - 1000 THz). SOFIA carried out its "Early" and "Basic Science" phase of astronomical observations in 2010 and 2011 and will begin its first regular observing cycle at the end of 2012, continuing through late 2013. I will highlight some early science results obtained using the mid-infrared camera FORCAST and far-infrared spectrometer GREAT covering topics from the Galactic center to star-formation. I will also discuss future proposal calls for General Investigator observations with SOFIA's full complement of instruments as well as opportunities for new instrumentation.