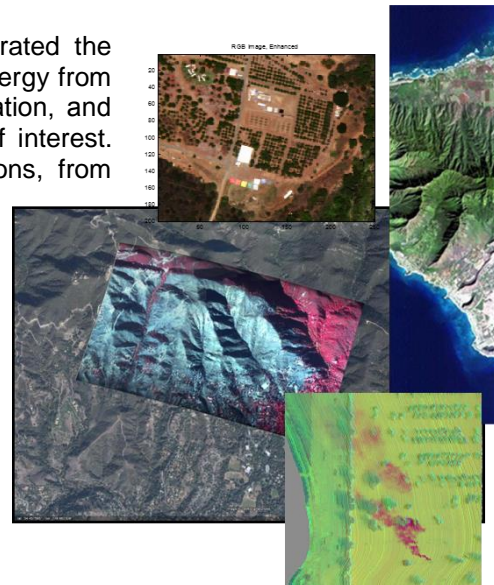




Hyperspectral Remote Sensing

Dr. Stephanie Sandor-Leahy, Northrop-Grumman Aerospace Systems

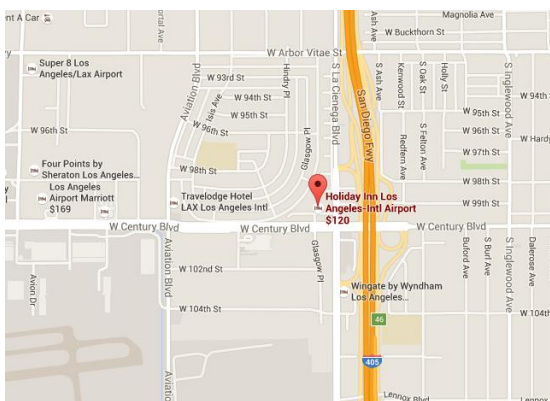
For over two decades, hyperspectral imaging (HSI) systems have demonstrated the capability to remotely detect subtle spectral features in reflected and emitted energy from the earth's surface and atmosphere. These features allow detection, identification, and characterization of materials without the need to spatially resolve materials of interest. This capability has proven crucial to a number of remote sensing applications, from natural resource monitoring to detection of military targets. Northrop Grumman Aerospace Systems (NGAS) has a long history of developing hyperspectral sensors. These sensors provide high resolution spectral coverage of wavelength ranges spanning the visible and near infrared (VNIR), short-wave infrared (SWIR) and long-wave infrared (LWIR), and the latest developments in this area have led to very compact, modular high-performance systems. In this talk Dr. Sandor-Leahy will give an overview of hyperspectral imaging – what it is and how it fits in the general category of EO/IR remote sensing. She will discuss space and airborne hyperspectral sensors and describe results of multiple HSI application studies where both large data volumes and high-dimensional data sets present challenges to accurate analysis. She will also describe some of the latest developments in HSI instruments and future directions for this sensing technology.



About our speaker: Stephanie Sandor-Leahy, PhD is a Senior Scientist at Northrop Grumman's Aerospace Systems Sector. She specializes in technology development for remote sensing focusing on advanced multispectral and hyperspectral imaging sensors and has over 20 years' experience in the field of airborne and spaceborne remote sensing. As a TRW Fellowship student she received her PhD in Electrical Engineering from the University of Southern California's Signal and Image Processing Institute. After graduating she returned to TRW where she became the science and applications team lead for Lewis HSI, the first space hyperspectral sensor built by TRW for NASA. She was a data scientist on

the program to build the Hyperion hyperspectral imager, which launched in 2000 and after 15 years is still operating on orbit. At Northrop Grumman, Dr. Sandor-Leahy has led development of airborne hyperspectral instruments operating in the visible through longwave IR spectral range, including TRWIS III, LWHIS and HATI-2500. Dr. Sandor-Leahy is currently leading the development of a new generation of compact hyperspectral instruments for civil and defense applications in earth imaging.

For Directions: <https://goo.gl/maps/n69jsT7yBoS2>



Wednesday, March 9th, 2016

Reception: 6:00

Silent Auction in support of the "Nature's Eyes" student award fund in honor of Don Wolpert

Dinner: 7:00; Talk: 8:00

Meal: Buffett Style Dinner

Cost: \$35 if registered by March 4, \$40 after. (OSSC Student Members are Free if registered by March 4, \$10 after)

Holiday Inn at LAX

9901 South La Cienega Blvd.

Los Angeles, CA 90045

Onsite Parking \$4

On-line Registration: www.osscc.org

Contact OSSC Arrangements Chair Bo Wang
Events@osscc.org, 714-420-8234

Please Register by March 4, 2016

Please post this notice and invite your friends & colleagues to attend!