

## IEEE FOOTHILL SECTION MICROWAVE THEORY AND TECHNIQUES SOCIETY, ANTENNAS AND PROPAGATION SOCIETY, AND CAL BAPTIST UNIVERSITY



# Synthetic Aperture Radar (SAR): Principles and Applications

Dr. David Jansing, Chief Engineer Electromagnetics Group, John Hopkins Applied Physics Laboratory, Howard County, Maryland

> March 6, 2019 (Wednesday), 6:00-8:00pm California Baptist University, 8432 Magnolia Ave, Riverside, CA 92504 TROESH Engineering Building, Room TEGR119

#### FOOTHILL SECTION MTTS CHAPTER OFFICERS

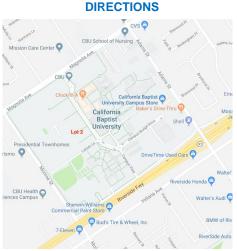
Max Cherubin, MTTS/APS Chair Ray Moreno, MTTS/APS Vice Chair

#### AGENDA

6:00 pm – Refreshments
6:30 pm – Announcements and Speaker Introduction
6:35 pm – Lecture, Dr. David Jansing
7:25 pm – Discussion (Q & A)
8:00 pm – Adjournment

### REGISTRATION

Available through vtools at: https://events.vtools.ieee.org/m/193575



Take the 91. Exit north on Adams Street. Make a left on Magnolia. Enter from the North gate. Park in Lot 2. Terra SAR X Satellite Image Aswan



Synthetic Aperture Radar (SAR) has been around for almost 70 years. Previously dominated by space and military applications, now commercial applications are changing the face of SAR.

**Dr. David Jansing**, the Chief Engineer in the Electromagnetic Systems Group at Johns Hopkins University Applied Physics Laboratory, has significant experience in algorithm development for detection and extraction of optical and electromagnetic signatures, particularly in infrared (IR), hyperspectral imaging (HSI) and synthetic aperture radar (SAR). Attending the University of Louisville and earning his B.S. and M.Eng. in Electrical Engineering in 1991 and 1992, and his Ph.D. in Computer Science and Engineering in 1997, Dr. Jansing has more than 20 years' experience in remote sensing (including maritime applications), signal and image processing,

data analysis, interpretation, modeling, optimization, synthetic aperture radar processing and machine learning (including deep learning and evolutionary computation). He has extensive experience in analysis, test planning and management, as well as extensive teaching experience, including full semester courses as well as short technical development courses. He currently teaches a graduate level course in Synthetic Aperture Radar (SAR) at Johns Hopkins University in the Whiting School's Engineering for Professionals program. Dr. Jansing is a recognized expert in remote sensing having won multiple awards, including the JHU APL FY2008 R. W. Hart Prize for Excellence in Independent Research and Development for the Exploitation of Synthetic Aperture Data Products IR&D, the 2011 University of Louisville Distinguished



Alumni Award, and the 2018 Whiting School Engineering for Professional Program "Exceptional Online Course Design" for EN 525.748 Synthetic Aperture Radar.