# 2015 Distinguished Lecturers

# Contact: Dr. Joe Fabrizio, Vice President - Education

All AESS Chapters and IEEE Sections are encouraged to take advantage of the AESS Distinguished Lecturer and Tutorial Program for their regular or special meetings. We have selected an outstanding list of speakers who are experts in their fields. The AES Society will pay reasonable speaker's expenses for economy-class travel, lodging and meals. As a general guideline, speaker's expenses involving travel wholly within North America or within the European Union will be covered up to \$1,000. Expenses involving extensive international travel will be covered up to \$2,000. The Society encourages arrangements whereby more than one lecture is presented in a single trip, and costs in such situations will be considered on a case by case basis. The inviting organization is expected to cover 50% of the speaker's expenses. The procedure for obtaining a speaker is as follows: If a Chapter or Section has an interest in inviting one of the speakers, it should first contact the speaker directly in order to obtain his or her agreement to give the lecture on a particular date. After this is accomplished, the Chapter or Section must notify the AESS VP for Education, joe.fabrizio@dsto.defence.gov.au. If financial support from the AESS is required for the speaker's expenses, he or she must submit an estimate to the AESS VP for Education before actually incurring any expenses. This estimate must be provided at least 45 days before the planned meeting to provide time for feedback from the VP for Education and for changes if needed. The VP for Education must provide written authorization to proceed.

#### Target Tracking and Data Fusion: How to Get the Most out of your Sensors

Yaakov Bar-Shalom, University of Connecticut ybs@engr.uconn.edu, (860) 486-4823

## High-Level Information Fusion Theory, Models and Representations **Information Fusion Performance Evaluation Methods of Image Fusion**

Erik P. Blasch, US Air Force Research Lab erik.blasch@gmail.com, (315) 330-2395

# Achievement, Breakthroughs and Future Trends in Phased Arrays and Radars - Updated to 2014

MIMO Radar - Demystified and Where it Makes Sense to Use Around the World in 60 Minutes -- Exotic Places With a Twist - An Informative Entertaining, Humorous Evening for the Whole Family Eli Brookner, Raytheon Company (Retired) eli.brookner@gmail.com, (781) 654-5550

# **National Missile Defense**

Larry Chasteen, University of Texas - Dallas chasteen@utdallas.edu, (972) 234-3170

#### MIMO Radar: Snake Oil or Good idea?

Never Trust a Simulation without a Simple Back-of-the-Envelope Calculation that Explains it **Nonlinear Filters with Particle Flow Real World Data Fusion** Is there a Royal Road to Robustness

Frederick E. Daum, Raytheon Company frederick\_e\_daum@raytheon.com

#### **Foliage Penetration Radar**

Mark E. Davis, Independent Consultant medavis@ieee.org, (315) 896-6373

# **Satellite Communication Systems**

Sai Durrani

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#### Robust Adaptive Array Processing for Radar Tutorial- Over-The-Horizon Radar: Fundamental Principles, **Adaptive Processing and Emerging Applications**

Giuseppe Fabrizio, Defence Science & Technology Organisation joe.fabrizio@dsto.defence.gov.au, +61 (08) 73896775

#### Radar Adaptivity: Antenna Based Signal Processing Techniques Alfonso Farina

alfonso.farina@outlook.it, 06-41502279

## Compression Based Analysis of Image Artifacts: Application to Satellite Images

Avid Roman Gonzalez, UPCH Perú avid.roman-gonzalez@ieee.org, +51 984904763

#### Sea and Land Clutter Statistical Analysis and Modeling Advanced Techniques of Radar Detection in Non-Gaussian Background

Sensor Selection for Multistatic Radar Networks Maria Sabrina Greco, University of Pisa

m.greco@ieee.org

#### The Challenge of Waveform Diversity Bistatic & Multistatic Radar

Hugh D. Griffiths, University College London h.griffiths@ieee.org, +44 20 76793966

# Cognitive Dynamic Systems (CDS)

**Cognitive Control** Cognitive Radar

Simon Haykin, McMaster University haykin@mcmaster.ca, (905) 525-9140

#### Multistatic Exploration - Introduction to Modern Passive Radar and **Multistatic Tracking & Data Fusion**

Tracking and Sensor Data Fusion - Methodological Framework and **Selected Applications** 

Wolfgang Koch, Fraunhofer FKIE

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## Antenna Systems for Aerospace Vehicles - Global Navigation Satellite System

Surendra Pal, ISRO Satellite Center pal\_surendra@hotmail.com, +91-80-25205275

# Effective Maritime Domain Awareness - A Systems of Systems Approach to Generating Actionable Intelligence

Tony Ponsford, Raytheon Company

tony\_ponsford@raytheon.com, (613) 772-2997

#### Business Case for Systems Engineering - Is Systems Engineering Effective?

Robert C. Rassa, Raytheon Company rcrassa@raytheon.com, (310) 985-4962

#### **Inertial System and GPS Technology Trends** Navigation Sensors and Systems in GNSS Degraded and Denied **Environments**

George T. Schmidt

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