



## Tutorial Sessions

All 18 Tutorials held Monday April 27, 2020 at Conference Hotel: Bethesda North Marriott Hotel & Conference Center, 5701 Marinelli Road, Rockville, Maryland 20852 USA, Phone: +1 301-822-9200 Refreshments served all day, but meals are not provided. Printed lecture notes are provided.

\*\*\*Students may register only for 1 tutorial per Session, and a maximum of 3 tutorials total. \*\*\*

### # Session One: 08:00-12:00 (8am-12pm)

- 1 **Introduction to Airborne Ground-Moving Target Indicator (GMTI) Radar:** Armin Doerry
- 2 **Electronic Scanned Array (ESA) Design:** John S. Williams
- 3 **Radar Systems Prototyping:** Lorenzo Lo Monte
- 4 **Radar Tracking, State Estimation and Association:** Chaw-Bing Chang, Keh-Ping Dunn
- 5 **Passive radar – from target detection to imaging:** Mateusz Malanowski, Piotr Samczyński, Krzysztof Kulpa
- 6 **Recent Developments in Maritime Radar Detection:** Luke Rosenberg, Simon Watts

### Session Two: 13:00-17:00 (1pm-5pm)

- 7 **Adaptive Array Antennas: Principles and Applications:** Randy Haupt, Mark Leifer
- 8 **Introduction to Automotive Radars:** Igal Bilik
- 9 **Advanced Radar Detection and Applications:** Scott Goldstein, Mike Picciolo, Wil Myrick
- 10 **Advanced Inverse Synthetic Aperture Radar Imaging:** Marco Martorella
- 11 **Ultra Wide Band Surveillance Radar:** Mark Davis
- 12 **Noise radar technology and noise waveform design – prospective solution for future SISO and MIMO systems:** Krzysztof Kulpa , Mateusz Malanowski

### Session Three: 18:00-22:00 (6pm-10pm)

- 13 **Over-the-Horizon Radar – Fundamental Principles, Adaptive Processing and Emerging Applications:** Giuseppe (Joe) Fabrizio
- 14 **Optimization Theory in Advanced Radar Signal Processing:** Augusto Aubry, Antonio De Maio, Vincenzo Carotenuto
- 15 **Bistatic and Multistatic Radar Imaging:** Marco Martorella, Brian Rigling
- 16 **Deep Learning for Radar Automatic Target Recognition (ATR):** Uttam Majumder, Erik Blasch, David Garren
- 17 **Joint Automotive MIMO-Radar-MIMO-Communications Signal Processing:** Kumar Vijay Mishra, Bhavani Shankar
- 18 **Air and Maritime Target Recognition: Dream, Theory & Practice:** Willie Nel, Jacques Cilliers