



## 2009 International Waveform Diversity & Design Conference

February 8 - 13, 2009

Orlando, Florida



### Conference Overview

Recent advances in hardware technology are enabling a much wider range of design freedoms to be explored for sensor and communication systems. As a result, there are emerging and compelling changes in system requirements such as more efficient spectrum usage, higher sensitivities, transmitter/receiver agility, greater information content, improved robustness to errors, etc. The combination of these is fueling a worldwide interest in the subject of waveform design and the use of waveform diversity techniques. This third conference in the on-going series will continue to build on the success of the previous two conferences by bringing together researchers from numerous diverse backgrounds and specialties to facilitate the exchange and cross-fertilization of ideas and research.

The WDD organizing committee invites original contributions to Waveform Diversity and Design in the general areas of Communications, Radar, Sonar, etc. Specifically, topics to be included are:

- Radar Systems
- Sonar Systems
- 3G/4G Communication Systems
- Laser Systems
- Interference Suppression
- RF Compatibility
- Space-Time Adaptive Processing
- Channel Estimation/Equalization
- Software Agile Radio/Radar
- Passive Sensing Operation
- Target-adaptive Matched Filtering

- Multi-function Operation
- Impulsive Systems
- Tomography
- Ultra-wideband Operation
- Target Detection
- Tracking
- Interferometry
- SAR/ISAR
- MIMO Communications
- RF Hitchhiking
- Error Correction Coding

- Modulation Schemes
- Multiple-access Schemes
- Multi-user Operation
- Bandwidth-on-Demand
- Synchronization
- RF Imaging
- Hardware Efficiency
- Bi-static/Multi-static Operation
- Sensor Fusion
- Polarimetry
- EM Phenomenology