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