

MONDAY 27 AUGUST 2018

START	FINISH	Boulevard B1	Boulevard B2	Boulevard B3	Room A1	START	FINISH
7:00	20:00	Registration Open				7:00	20:00
8:20	10:20	Introduction to Airborne Radar	Radar Clutter Modelling and Exploitation	Advanced Multistatic Passive Radar – from Detection to Imaging	Inverse Synthetic Aperture Radar	8:00	10:00
10:20	10:40	Morning Tea				10:00	10:15
10:40	12:40	Introduction to Airborne Radar	Radar Clutter Modelling and Exploitation	Advanced Multistatic Passive Radar – from Detection to Imaging	Inverse Synthetic Aperture Radar	10:15	12:15
12:40	13:20	Lunch				12:15	12:45
13:20	15:20	Introduction to Airborne Radar	Radar, Phases-Arrays, Metamaterials, Cognitive-Radar and MIMO – Basics, Advances and Breakthroughs	Air and Maritime Target Recognition: Dream, Theory and Practice	24 and 79 GHz Automotive Radar Systems and Applications	12:45	14:25
15:20	15:40	Afternoon Tea				14:25	15:00
15:40	17:40	Introduction to Airborne Radar	Radar, Phases-Arrays, Metamaterials, Cognitive-Radar and MIMO – Basics, Advances and Breakthroughs	Air and Maritime Target Recognition: Dream, Theory and Practice	24 and 79 GHz Automotive Radar Systems and Applications	15:00	17:00
Boulevard Auditorium Foyer							
17:30	19:00	Welcome Reception				17:00	19:00
Boulevard Auditorium							
19:00	20:00	Free Public Talk				19:00	20:00

START	FINISH	Boulevard Auditorium		
8:00	18:00	Registration Open		
9:00	9:25	Welcome and Conference Open		
9:25	10:10	Bruce Cornish Boeing PhantomWorks International		
10:10	10:40	Morning Tea		
		Boulevard B1	Boulevard B2	Boulevard B3
Concurrent Session 1				
10:40	12:00	Detection 1 <i>Chairperson: Van Nguyen, Brian Ng</i>	Radar Systems and EW <i>Chairperson: Andy Stove, David Enchelmaier</i>	MIMO Radar <i>Chairperson: Justin Metcalf, Douglas Gray</i>
10:40	11:00	41: Modified cell averaging CFAR detector based on Grubbs criterion in multiple-target scenario Wei Zhou	109: Analysis of an Ultra High Resolution Wideband False Target Technique Manik Attygalle	57: Moving target detection in spatially heterogeneous clutter using distributed MIMO radar Justin Metcalf
11:00	11:20	185: Optimised scan to scan integration techniques for low observable target detection in sea clutter Krishna Venkataraman	167: Intercepting Beam-Agile Radar Vaughan Clarkson	53: Window Function for MIMO Radar Beamforming to Mitigate Multipath Clutter Ryuhei Takahashi
11:20	11:40	28: Rapidly Adaptive CFAR Detection by Merging Individual Decisions From Two-Stage Adaptive Detectors Anatolii Kononov	141: A high resolution radar-acoustic sensor for detection of close-in air turbulence Graham Brooker	71: Multipath Detection by using Space-Space Adaptive Processing (SSAP) with MIMO Radar Oliver Biallawons
11:40	12:00	156: A Bayesian Based CFAR Detector for Pareto Type II Clutter Graham Weinberg	55: Suppression of Range Sidelobes of Random Modulations Andy Stove	19: Radar and Phased-Arrays: Advances, Breakthroughs and Future Eli Brookner
12:00	13:30	Lunch		
		Boulevard B1	Boulevard B2	Boulevard B3
Concurrent Session 2				
13:30	15:10	Multidimensional Radar Imaging - Invited <i>Chairperson: Marco Martorella, Hai Tan Tran</i>	Passive Radar 1 <i>Chairperson: James Palmer, Ashley Summers</i>	Student Paper Final <i>Chairperson: Vaughan Clarkson, Luke Rosenberg</i>
13:30	13:50	146: Multi-Bistatic Doppler Radar Tomography for Non-Cooperative Target Imaging Hai-Tan Tran	93: Results of Airborne PCL under CCI conditions using DVB-T Illuminators of Opportunity Ashley Summers	74: Drone Detection and RCS Measurements with Ubiquitous Radar Álvaro Duque De Quevedo
13:50	14:10	22: Radar Automatic Target Recognition based on Disjoint Multi-static K-space Coverage David Blacknell	130: Sensitivity Optimisation of Real-Time Adaptive Range Doppler Processing in FM Passive Radar Joshua Sendall	176: Fast Direction-of-Arrival Estimation in Coprime Arrays William Baxter
14:10	14:30	72: Passive 3D InSAR using target-borne illuminator of opportunity Marco Martorella	160: Aspects of Delay-Doppler Filtering in OFDM Passive Radar Stephen Searle	25: Target Detection in High-Resolution SAR Images Based on Modified Active Contour Model Tao Li
14:30	14:50	171: Multiband Polarimetric SAR in Arctic Scenarios Ernst Krogager	150: Sequential Detection for Passive Radar, Part 1: the A-C DF-map Detector Tri-Tan Cao	131: Improved Microwave Imaging by Wavenumber Domain Multiband Data Fusion Jianping Wang
14:50	15:10	187: Exploration of multidimensional Radio Frequency imaging to derive Remote Intelligence of Building Interiors David Blacknell	151: Sequential Detection for Passive Radar, Part 2: the A-C Guard Detector Tri-Tan Cao	126: M-SPURT—Compressing the target characterization for a fast monostatic RCS simulation Henna Perälä
15:10	15:40	Afternoon Tea		
		Boulevard B1	Boulevard B2	Boulevard B3
Concurrent Session 3				
15:40	17:00	Radar Systems <i>Chairperson: Ken Yamazaki, Hedley Hansen</i>	Automotive Radar <i>Chairperson: Hermann Rohling, Pina Dall'Armi-Stoks</i>	Modelling <i>Chairperson: Josef Zuk, Stephane Saillant</i>
15:40	16:00	96: Optimizing the Sidelobe Level of a Two-Way Antenna Pattern by Thinning the Receive Aperture Randy Haupt	42: Autonomous Back-in Parking Based on Occupancy Grid Map and EKF SLAM with W-Band Radar Hyukjung Lee	24: Simple Analytic Approximation for Non-Coherent Radar Detection with Partially Correlated Target RCS and Compound Sea Clutter Josef Zuk
16:00	16:20	169: Improved Tx-to-Rx Isolation of Radar Transceivers Using Integrated Full Duplexer with PLL Choon Sik Cho	125: Joint Parameters Estimation using 3D Tensor MUSIC in the Presence of Phase Residual Shengzhi Xu	153: Using VOR to estimate radar cross section of airliners by inverting the radar equation Stéphane Saillant
16:20	16:40	123: Low-THz Wave Snow Attenuation Fatemeh Norouziyan	64: A simple-structure FMCW radar test system using PLL-Gunn oscillator and fundamental mixer in 79 GHz band Kohei Fujiwara	128: Estimating the distribution of RCS using sparse measured samples Minna Väilä
16:40	17:00	168: Analysis and modelling of multichannel millimetric wave propagation measurements in a tropical littoral environment Hedley Hansen	78: Azimuth Enhancement for Automotive SAR Imaging Shahzad Gishkori	117: Study and Simulation of Radar Target's Micro-Doppler Signature Reena Mangain

START	FINISH	Boulevard Auditorium		
8:00	18:00	Registration Open		
9:00	9:45	Jaime Lien Google Advanced Technology and Projects		
9:45	11:15	Morning Tea and Poster Session		
Boulevard Auditorium				
11:15	12:00	Fauzia Ahmad Temple University		
12:00	13:30	Women in Engineering and Young Professionals Event		
12:00	13:30	Lunch Break		
		Boulevard B1	Boulevard B2	Boulevard B3
Concurrent Session 4				
13:30	15:10	Passive Radar 2 - Invited <i>Chairperson: Rob Young, Diego Cristallini</i>	Multichannel Processing <i>Chairperson: Jacques Cillier, Gordon Frazer</i>	Cognitive Radar <i>Chairperson: Eli Brookner, Hugh Griffiths</i>
13:30	15:50	35: Rocket detection using passive radar - challenges and solutions Mateusz Malanowski	166: Estimation of the DOAs of Coherent Signals in Beam Space Processing for Phased Arrays Douglas Gray	75: Maneuvering Target Tracking with Recurrent Neural Network for Radar Application Chang Gao
13:50	14:10	134: MIMO-FM : A Solution to Estimate Target Elevation with Passive FM Radar Dominique Poullin	142: Energy-budget Analysis for Phased-Array Radar with Optimum Beamforming Gordon Frazer	118: A Neural Network Target Detector with Partial CA-CFAR Supervised Training Jabran Akhtar
14:10	14:30	29: Passive Radar as a Part of Critical Infrastructure Protection - Selected Results from SCOUT Project Piotr Samczynski	70: Adaptive Detection with Censored Data in Multistatic Radar Ding Cao	6: Cognitive Adaptive Array Processing (CAAP) -- Its Time Has Come Eli Brookner
14:30	14:50	124: Marine target localization with passive GNSS-based multistatic radar: experimental results Mike Antoniou	116: Analysis of Chosen Results Based on Trials with Distributed and Collocated Passive-Active Radars Tadeusz Brenner	47: Air Vehicle Target Recognition with Jammer Nulling Adaptive Waveforms in Cognitive Radar using High-Fidelity RCS Responses Q. Jeanette O. Tan
14:50	15:10	119: Passive SAR Satellite System (PASSAT): Ground Trials Mikhail Cherniakov	52: A Clutter Sample Selection-based Generalized Sidelobe Canceller Algorithm for Ionosphere Clutter Suppression in HFSWR Jianyu Zhou	162: Human Activity Detection and Classification Based on Micro-Doppler Signatures Near the Baseline of Forward Scattering Radar Raja Syamsul Azmir Raja Abdullah
15:10	15:40	Afternoon Tea		
		Boulevard B1	Boulevard B2	Boulevard B3
Concurrent Session 5				
15:40	17:00	Passive Radar 3 - Invited <i>Chairperson: Mateusz Malanowski, Piotr Samczynski</i>	Tracking <i>Chairperson: Jason Williams, Sam Davey</i>	Sea Clutter <i>Chairperson: Luke Rosenberg, Stephen Bocquet</i>
15:40	16:00	86: Electronic Countermeasure for OFDM-based Imaging Passive Radars Marco Martorella	62: Target tracking and classification for missile using interacting multiple model (IMM) Kyungwoo Yoo	140: Two component statistical model of coherent radar sea clutter Stephen Bocquet
16:00	16:20	26: Air Target Imaging in Multichannel and Multistatic Passive Radars - Selected Results From MAPIS Project Piotr Samczynski	157: Tracker Operating Characteristic for Integrated Probabilistic Data Association Vaughan Clarkson	148: Characterisation of the Tri-Modal Discrete Sea Clutter Model Luke Rosenberg
16:20	16:40	10: Multi-band passive radar imaging using satellite illumination Diego Cristallini	165: UWB Radar Based Localization of a Person Changing the Nature of Their Motion State Dusan Kocur	149: Comparison of Bi-Modal Coherent Sea Clutter Models Luke Rosenberg
16:40	17:00	94: Reconstruction and reciprocal filter of OFDM waveforms for DVB-T2 based passive radar Daniel O'Hagan	159: Towards an Accuracy Bound for OTHR Sam Davey	173: Performance evaluation of two multistatic radar detectors on real and simulated sea-clutter data Riccardo Palama
Boulevard Room				
19:00	22:30	Conference Dinner		

START	FINISH	Boulevard Auditorium		
9:00	9:45	James Palmer Silentium Defence		
9:45	11:10	Morning Tea & Poster Session		
		Boulevard B1	Boulevard B2	Boulevard B3
		Concurrent Session 6		
11:10	12:30	Compressive Sensing 1	SAR 1	Waveform Design 1
		<i>Chairperson: Hai Tan Tran, Konstanty Blalkowski</i>	<i>Chairperson: Mark Preiss, Willie Nel</i>	<i>Chairperson: Yunhan Dong, Stephen Howard</i>
11:10	11:30	189: Radar Target Detection Using Target Features and Artificial Intelligence Hai Deng	43: Geosynchronous SAR moving target detection and motion parameters estimation using Non Uniform Cubic Phase Function algorithm Mounir Melzi	38: Novel range-Doppler processing and waveform design method for extending unambiguous Doppler Yinsheng Wei
11:30	11:50	90: Open Set Radar HRRP Recognition Based on Random Forest and Extreme Value Theory Wei Chen	85: Estimation of NRCS of Oil-free and Oil-covered Marine Surfaces in L-band. Assessment with UAVSAR data Ali Khenchaf	48: Phase Coded Waveforms with Optimal Peak-to-Sidelobe Ratio and Optimal Confined Bandwidth Yunhan Dong
11:50	12:10	30: SAR Image Target Recognition via Dynamic Kernel Dictionary Learning Caiyun Wang	127: Approximating Bistatic SAR Target Signatures with Sparse Limited Persistence Scattering models Emre Ertin	50: Practical Waveforms Coded by Golay Binary Pairs to Achieve Extra-Low Range Sidelobes and Doppler Resilience Yunhan Dong
12:10	12:30	205: High-Resolution Radar Imaging with Unknown Noise Yu Zhang	110: First Results from the Ingara L-band SAR Mark Preiss	100: Experimental Validation of Phase-Attached Radar/Communication (PARC) Waveforms: Radar Performance Justin Metcalf
12:30	13:30	Lunch Break		
		Boulevard B1	Boulevard B2	Boulevard B3
		Concurrent Session 7		
13:30	14:50	Compressive Sensing 2	SAR 2	Waveform Design 2
		<i>Chairperson: Fauzia Ahmed, David Blacknell</i>	<i>Chairperson: Paul Pincus, David Crisp</i>	<i>Chairperson: Troy Kilpatrick, Sandun Kodituwakku</i>
13:30	13:50	154: Nonlinear Least-Squares Post-Processing for Compressive Radar Imaging of A Rotating Target Ngoc Hung Nguyen	115: Ultra-High Resolution and Long Range X-Band Airborne SAR System Remi Baque	81: A range sidelobe suppression technique based on adaptive spectral shaping for LFM waveforms Van Khanh Nguyen
13:50	14:10	155: Fast 2-D Direction of Arrival Estimation Using Two-Stage Gridless Compressive Sensing Mert Kalfa	143: Robust absolute calibration for SAR David Crisp	82: Spectral Sidelobe Suppression of Nonuniform Pulse Repetition Frequency Waveforms in Strong Clutter Sandun Kodituwakku
14:10	14:30	147: Windfarm Interference Mitigation using Compressive Sensing Techniques and Tilted-Wire Scatterer Model Ross Kyprianou	112: Coherent change detection under a forest canopy Paul Pincus	114: Detection of Human Echolocator Waveform using Gammatone Filter Processing Raja Syamsul Azmir Raja Abdullah
14:30	14:50	158: Real Aperture Imaging using Sparse Optimisation with Application to Low-Angle Tracking Paul E. Berry	34: ISAR Multi-band Fusion Based on Attributed Scattering Center Yu Ning	49: Frequency Diverse Array Radar Data Processing Yunhan Dong
14:50	15:50	Conference Closing Cocktail Reception		

FRIDAY 31 AUGUST 2018

START		FINISH		Boulevard B1		START		FINISH	
8:00	16:30	Registration Open				8:00	16:30		
9:00	10:00	Special Course on Tactical Data Links				9:00	10:00		
10:00	10:30	Morning Tea				10:00	10:30		
10:30	11:30	Special Course on Tactical Data Links				10:30	11:30		
12:00	12:30	Lunch				12:00	12:30		
12:30	14:30	Modeling Multi-function Phased Array Systems Course Sponsored by MathWorks				12:30	14:30		
14:30	15:00	Afternoon Tea				14:30	15:00		
15:00	16:30	Modeling Multi-function Phased Array Systems Course Sponsored by MathWorks				15:00	16:30		