

- AES Distinguished Lecture by Dr Eli Brookner, 21 April 2010: 'Amazing Breakthroughs in Radar / Phased Arrays'
- Lecture by Prof. Simon Haykin, 31 August 2010 'Cognitive Radar: First Experimental Results'
- International Conference on Synthetic Aperture Sonar and Synthetic Aperture Radar, Lerici, Italy, 13/14 September 2010. Organised by Institute of Acoustics (UK) with AES co-sponsorship, financial support from US ONR Global
- Recording made of NATO Lecture Series on 'Waveform Diversity and Design', for AES web-based tutorials. Two full days of lectures by Kevin Magde, Antonio De Maio, Frederic Barbaresco, Hugh Griffiths, Hermann Rohling
- Planning started for IET International Radar Conference RADAR 2012, Edinburgh, October 2012

Hugh Griffiths AES Chapter Chair, UKRI







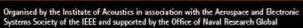
International Conference

Synthetic Aperture Sonar and Synthetic Aperture Radar

13th - 14th September 2010 Villa Marigola, Lerici, Italy

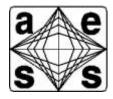






ØIEEE





Synthetic Aperture Sonar and Radar

	MONDAY 13 SEP			
09:00	Registration and Coffee	12.4		
09:30	Conference opening			
09:40	Research Leastlers Optimized Chenge Betweinen CDDiver/Consultant	12.5		
10:25	Polarimetrically persistent scatterer based auto- matic target recognition			
	E Guasti, M Mantanella (University of Pisa), A Capete (ReSS Centre, CN07)	13:09		
10:35	Temporal variability of seafloor roughness and its impact on coherent change detection	14,0		
	A PLyons, D C Brown (Poon State University, Applied Teseasch Laboratory)	14.1		
10:45	Estimation of Target Orientation in SAS Images If Midelari, @Mission (IH, Norway)			
10:55	Coffee	14.2		
11:25	New SAS classification mode for Mine Countermeasure Vessels			
	N Burtet, M Chabah, E Poinier (Thales Underwater Systems)	14.3		
11:35	Synthetic Aperture Image Reconstruction via Backpropagation using Commodity Graphics Processors			
	D.A.Caok, D.P.Compheil (Georgia Tech, USA)	14.4		
11:45	Autofocus for Circular Synthetic Aperture Imaging			
_	H.J. Callow, R.F.Hansen, T.O.Sachoe, SAV Symmes (IP), Norwey (14.5		
12.05	Kronecker DFT Beamforming Algorithms for Sonar Signal Processing			
	D Rodriguez, A Fuentes (University of Paerto Rico)	_		
12.15	Automatic Fusion of Multiple Target Views for Enhanced Interpretation	15.0		
	E Cointa, J Groen, D Williams (NURC)	15.4		
12,25	Delineating targets in SAR images by parallel simulated annealing	15,11		
	P Cooper (Tessella pic), 5 Potter (MELDA)			
12.35	Detection of Spherical Inclusions Using Active Surfaces	15.2		
	D.A.Cook, F.Fedele, A.J.Yezzi (Georgia Tech)			

EPTE	MBER
12.45	Simultaneous Low Frequency & High Frequency High Resolution SAS and a statistical method of quantifying the resolutions obtained
	N P Glover, 1 Campbell (Atlas UR)
12.55	Simulation of Rippled-Sand Synthetic Aperture Sonar Imagery
	SF Jahnson (Johns Hopkins University APL)
13:05	Lunch
14.05	Processing SAR data with gaps in the aperture: a compressed sensing perspective
	G Hilling, C Du, M Davies, B Malgrew (University of Edinburgh)
14.15	Analysis of Shadow Contrast Ratio for Synthetic Aperture Sonar Imagery
	DA Cook (Georgia Tech), DC Brown (Pean State University Applied Research Laboratory)
14.25	Interferometric Measurements Using Redundant Phase Centers of Synthetic Aperture Sonars
	J1 Photos, J Fernandos, J Straud, T (L. Michael (Noval Surface Worlane Center, USA)
14.35	A comparison between interferometric SAS and interferometric SAR
	10 Serboe, RT Hansen (FFL Norway)
14.45	Analysis and comparison of different SAR image speckle reduction techniques applied to SAS
	D Looperz, R Heremons (IMM, Belgium), A Fizurico (Llaiversity of Gent), Y Dupont (Ministry of Defence, Belgium)
14.55	Correlation-Based Change Detection for Synthetic Aperture Sonar
	D.D.Sternlicht, T.G. Michael, J.K.Hanhough (Navat Surface Worfare Centre: USAJ
15.05	Study, design and concept of low frequency SAS
	YPhilhas, YPetillat, C Capus (Venot -Wast University), II Hallett (NURC), II Mulgows (University of Edinburgh)
15,15	Non-Abelian Computational Signal Processing Methods for Compressed Sensing MIMO SAR Waveform Design

D Radriguez (University of Puerta Real

- 5.25 Automatic SAS target recognition using region based features, SVMs and adaptive boosting
 - PHill A Action, D Gilson (University of Bristol)

Institute of Acoustics

MONDAY 13 SEPTEMBER	TUESDA		
Coffee	09:00	Reynold Let	
Characterisation of Modulating Signatures within SAR Imagery		M Wezz (HHR, G	
D Mult, M Nattingham, D Andre, & Barber, D Blacknell (Dati), H D. Griffiths (University College Landan)	09:45	Data fusion	
A mine-penetration sonar: system concept, design and simulation	10:05	P Stines, M Gree (SELEX Sistem) I Inverse Forv	
R D Hollett (NURC)		M Chemiakov/I	
Canonical Correlation Analysis for Coherent Change Detection in Sonar Imagery	10:25	Robust synt underwater	
M Teafaye (Naval Surface Warfare Center, USA)	10:45	A correlated	
Classification using multiple pass fusion		reverberatio S Dugeloy (Dsti)	
A Wilby (Applied Signal Technology)	11:05	Coffee	
Fractal dimension based sand ripple suppression for mine hunting with sidescan sonar	11:35	Pareto-Opti	
108 Nebon, NG Kingsbury (University of Cambridge)	11:55	GB-SAR and forming a sy	
Compressive Sensing for Synthetic Aperture Sonar		PF Sammartina	
J Clisanes (Navai Surface Warfare Center, USA)	12:15	Target and i Synthetic A	
Synthetic aperture sonar as a tool for deep ocean surveying	12:35	PTGough MPI Constant en	
A Wilby (Applied Signal Technology)		for closely-s 5 Ahmed, J 5 Th	
Detection of Double Scatterers in Multi- Dimensional SAR Imaging	12:55	Y Petillat (Herio	
A Plauchillia, A De Maio (University of Napoli)	14:00	Revnett Les	
Reception and Posters		Phageness of a Shipping man	
Conference dinner		WS Bando (Dina Systems Defence	
	14:45	Some open	

15:35

16.15

16.25

16,35

16.45

16.55

17.05

17.15

17:25

TUESDAY 14 SEPTEMBER

9:00	Reveal of papers with EaSAR 2010
	M Wexs (HIR, Germany)
9:45	Data fusion in a multistatic radar system (invited)
	P Stinza, M Greca, F Gini (University of Pisa), A Facina (SEEX Sistemi Integrati)
3:05	Inverse Forward Scatter SAR (invited)
	M Chemiakav (University of Birmergham)
0:25	Robust synthetic aperture sonar for autonomous underwater vehicles (invited)
	ILE Hansen, H.I.Collow, 10 Sarbor, SAV Synnes (IFF, Narway)
0:45	A correlated K-distributed model for seabed reverberation using imaging sonar (invited)
	5 Dugelay (Dsti), V Myers (DRDC, Canada)
1:05	Coffee
1:35	Pareto-Optimal Radar Waveform design (invited)
_	A De Majo (University of Napoli)
1:55	GB-SAR and MIMO radars: alternative ways of forming a synthetic aperture (invited)
	PF Sammartins, D Tarchi, F Oliveri (ISPBA)
2:15	Target and image statistics for a short-range Synthetic Aperture Sonar (invited)
_	PT Gaugh, MP Hayes (University of Canterbury, New Zealand)
2:35	Constant envelope waveform design techniques for closely-spaced MIMO radar (invited)
	5 Ahmed, J 5 Thompson, B Mulgrew (University of Edinburgh) Y Petilikat (Heriot-Watt University)
2:55	Lunch
4:00	Gevrietz Lestur.
	Progress to micromity consends a new partner- ship of man and machine
	WS Bando (Director, Systems Engineering for Autonomous Systems Defence Technology Centre)
4:45	Some open issues in synthetic aperture sonar (invited)
	M Finto (NURC)
5:05	Target detection and identification in Synthetic Aperture Sonar using AUVs (invited)
	+ Petillot, Y Polihas, J Sawas, N Valeyrie (Heriot-Wate University)
5:25	Coherent Change Detection over Mountainous Terrain (invited)
	D Blackned (Datil
5:00	Close
	9:00 9:45 0:05 0:25 0:45 1:05 1:55 1:55 2:55 4:00 4:45 5:05



Radar Systems Panel



Dear Hugh,

I expect to make the following proposal at the next RSP meeting. The RSP Chair would sit for a 2 year term beginning in June. The RSP Chair would be selected by popular vote among the members present at the spring meeting (held annually in conjunction with the IEEE Radar Conference) during the second year of the RSP Chair's term. Any RSP member may self nominate, but must be present at the RSP meeting to do so. The RSP Vice Chair would be selected by the chair, and could serve as RSP Chair at any meeting (RSP, AES BOG, etc) for the Chair. The RSP Vice Chair could be selected as the next RSP Chair only by popular vote among the members present at the spring meeting (held in conjunction with the IEEE Radar Conference). If the RSP Chair steps down, the Vice Chair would serve as Chair until elections are held at the next spring meeting.

Mike

Hugh Griffiths Past Chair, Radar Systems Panel