

Tuesday 16 December

14:00	15:30	<i>Compressive Signal Processing</i>	Professor Richard Baraniuk
15:30	16:00	<i>Beyond Bandlimited Sampling: Nonideal Sampling, Smoothness and Sparsity</i>	Yonina C. Eldar, Tsvi Dvorkind and Moshe Mishali
16:00	16:30	<i>Non-negative Matrix Factorisation of Compressively-Sampled Non-Negative Signals</i>	Paul D. O'Grady and Scott T. Rickard
16:30	18:00	Tea & Posters	
		<i>Decompounding on compact Lie groups</i>	Nicolas Le Bihan, S. Said, C. Lageman, J.H. Manton and L. Margerin
		<i>Sparse time-frequency distributions of chirps from a compressed sensing perspective</i>	Patrick Flandrin and Pierre Borgnat
		<i>The Time-Frequency Representation of Ordinary Differential Equations</i>	Heidi Hindberg and Alfred Hanssen
		<i>A new overdetermined frequency domain blind source separation approach</i>	Yonggang Zhang, Syed Mohsen Naqvi, Sangarapillai Lambotharan and Jonathon A. Chambers
Posters		<i>A Multi-User SC-FDE-MIMO System Exploiting Robust SLR-Based Beamforming</i>	A. Aljohani and J. Chambers
		<i>A Sampling Theorem For Bilevel Polygons Using E-Splines</i>	Hojjat Akhondi Asl and Pier Luigi Dragotti
		<i>A Simple Alamouti Single-Carrier Space-Time Relaying Scheme for use in Asynchronous Wireless Relay Networks</i>	M Hayes, J.A.Chambers and M.D.Macleod
		<i>Comparison of Localization Algorithms using Time Delay of Arrival Estimates</i>	Aishwarya Moni and Scott Rickard
		<i>Microstructure Bias and Multiscale Model Choice</i>	Sofia Olhede, Adam Sykulski and Greg Pavliotis
		<i>Wavelet Transform in Image Regions Classification</i>	Ales Prochazka, Eva Hostalkova, and Andrea Gavlasova

Wednesday 17 December

09:00	09:30	<i>About the extension of the 1D analytic signal to improper complex valued signals</i>	N. Le Bihan and S.J. Sangwine
09:30	10:00	<i>Estimation of Frequency Trajectories using Parsimonious Time-Varying Auto-Regressive Models with Particle Filters</i>	H. Zheng, P.R. White and Chengming Pei
10:00	10:30	<i>New Skew-Radial Basis Functions for Time-Series Prediction</i>	Arta A. Jamshidi and Michael J. Kirby
10:30	11:00	<i>On the hops present in Costas permutations</i>	Konstantinos Drakakis
		<i>Generated, emergent, and sporadic Costas arrays</i>	K. Taylor, K. Drakakis, S. Rickard
11:00	12:45	Coffee & Posters	
Posters		<i>Distributed Parameter Estimation with Side Information</i>	James P. Reilly, James P. Reilly and Shahram Shirani
		<i>On the estimation of the entropy using k-th nearest neighbors</i>	Pierre-Olivier Amblard, Olivier Michel, Steeve Zozor and Ana Maria Cuculescu
		<i>Planar Local 2D Signal Processing by Generalized Hilbert Transforms on S^3</i>	Lennart Wietzke and Gerald Sommer
		<i>Spectral Analysis via Analytic Signal – based Instantaneous Frequency Estimation.</i>	Steve McLaughlin, Yannis Kopsinis

<i>Fast Adaptive Image In-painting Using the Prolate Spheroidal Sequences</i>	Roland Wilson and Hong Xiao
<i>Time-Varying Speech Models for Online Blind Dereverberation</i>	James R. Hopgood, Christine Evers, Sharad Nagappa
<i>An Algorithm for Calculating the QR Decomposition of a Polynomial Matrix</i>	Joanne Foster, John McWhirter and Jonathon Chambers

Companding in the RF front-end to reduce adjacent channel interference resulting in a lower required ADC resolution for Software Defined Radio C.H. Slump and R. Schiphorst

12:45	14:00	Lunch	
14:00	14:30	<i>A Comparison of Delay Estimation & Bottleneck-link Detection Methods for Network Tomography</i>	Nick Johnson, John Thompson, Steve McLaughlin and Francisco J. Garcia
14:30	15:00	<i>Peak-to-average power ratio mitigation in quasi-orthogonal space time block coded MIMO-OFDM systems exploiting cross-antenna rotation and inversion</i>	F.S. Alharbi and Jonathon A. Chambers
15:00	15:30	<i>One Microphone Audio Source Separation Using Convolutional Non-negative Matrix Factorization with Sparseness Constraints</i>	Wenwu Wang
15:30	16:00	<i>Optimal Microphone Placement for Active Speaker Localization</i>	Damien Kelly and Frank Boland
16:00	18:00	Tea & Posters	
		<i>Density Estimation by k Nearest Neighbours</i>	Prof. John Hudson
		<i>Compressed Sensing Reconstruction using Iterative Hard Thresholding</i>	Thomas Blumensath and Mike E. Davies
		<i>A Generalized Blind Lag Hopping Adaptive Channel Shortening Algorithm which Exploits Squared Auto Correlation Minimization (GLHSAM)</i>	K. Maatoug and J.A.Chambers
		<i>DSP for Coherent Optical Systems</i>	David Millar and Seb Savory
Posters		<i>A Multivector Teager Filter</i>	Sven Buchholz, Gerald Sommer and Hendrik Schnepel
		<i>A functional approach to signal processing under nonlinear constraints</i>	Salem Said and N. Le Bihan
		<i>Statistical, Spectral and Stochastic Characteristics of Music</i>	Jacqueline Walker and Declan Quinn
		<i>Sparse Multi-channel Echoic Source Separation</i>	Ruairi de Frein, Barak A. Pearlmutter and Scott T. Rickard
		<i>Head Related Impulse Response Simplification by Deconvolution.</i>	Claire Masterson and Frank Boland
		<i>Time-Frequency Surrogates for Nonstationary Signal Analysis</i>	Pierre Borgnat and Patrick Flandrin

Thursday 18 December

09:00	09:30	<i>Dual Number Subalgebras mapped to Digital Signal Processing Structures</i>	D Alfsmann and Heinz G. Göckler
09:30	10:00	<i>Multivariate Time Series Graphical Modelling for Analysis of Brain Connectivity</i>	Andrew Walden, Tarek Medkour and Adrian Burgess

10:00	10:30	<i>Directed information flow through scales</i>	Pierre-Olivier Amblard and Olivier Michel
10:30	11:00	<i>Folding and encryption of compressible data</i>	Laura Rebollo-Neira and James Bowley
11:00	12:45	Posters	
		<i>Non-stationary chaos modelling approach based on processes with random structure</i>	V. Kontorovich & Z. Lovtchikova
		<i>Design of Flexible-Length Fast Fourier Transform For Channel Bandwidth Optimisation</i>	Dr. Keith John Jones
		<i>Design of Real-Data Fast Fourier Transform For Power-Constrained Environments</i>	Dr. Keith John Jones
		<i>Polynomial Matrix QR Decomposition for Broadband MIMO Wireless Communications</i>	Martin Davies, J. Foster, J. Chambers, S. Lambotharan and J. McWhirter
		<i>A Signal Processing Approach to Countering the Security of DM-QIM as a Steganographic Principle</i>	B.R.Matam and David Lowe
		<i>A Subspace Approach to Detect Directional Causality in Multiple Time Series</i>	Erik Casagrande and David Lowe
		<i>Binaural Speech Separation Based on Convolutional ICA and Ideal Binary Mask Coupled with Cepstral Smoothing</i>	Wenwu Wang, Tariqullah Jan and DeLiang Wang
		<i>Particle Filtering with Optimal Measurement Selection</i>	Kiriakos Kiriakidis, John W. Nicholson, Melinda Hock, Keunha Lee and Edward N. Khoury
		<i>Wavelet-based transforms as a means of signal separation</i>	Jacqueline Walker and Declan Quinn
12:45	14:00	Lunch	