



UK-China workshop on SSA and its applications

Room M/0.40, Cardiff School of Mathematics, Cardiff University

Day 1: September 20, 2010 **Theoretical and methodological aspects of SSA**

Time		
9:30 — 9:50	Registration	
9:50 — 10:00	Opening	
	Speaker	Title
10:00 — 10:30	Anatoly Zhigljavsky (UK)	An introduction to SSA
10:40 — 11:10	Milan Palus (Czech Republic)	SSA: Uncovering dynamics and interactions in complex systems
Tea, Coffee		
11:30 — 12:00	Nina Golyandina (Russia)	On the choice of parameters in SSA and related subspace-based methods
12:10 — 12:40	Donald Poskitt (Australia)	A conditional moment test for window-length selection in SSA of regular processes
12:50 — 13:10	Ivan Markovsky (UK)	Fitting algebraic curves to data
Lunch		
2:00 — 2:20	Konstantin Usevich (Russia)	SSA for textured images
2:30 — 2:50	Jonathan Gillard (UK)	Singular spectrum analysis, Cadzow iterations, and linear recurrent formulae
3:00 — 3:20	Karl Michael Schmidt (UK)	Approximate projectors in SSA
3:30 — 3:50	Andrey Pepelyshev (UK)	Comparison of vector and recurrent forecasting
Tea, Coffee		
4:10 — 6:00	SSA Lab Session	



Day 2: September 21, 2010

Applications of SSA in economics and finance

Time	Speaker	Title
10:00 — 10:30	Hossein Hassani (UK)	A Review on SSA for economic and financial time series
10:40 — 11:00	Saeid Heravi (UK)	Forecasting UK industrial production with MSSA
Tea, Coffee		
11:30 — 11:50	Costas Leon and Christina Beneki (Switzerland)	Singular spectrum and cross-spectral analysis of the USA GDP and unemployment time series
12:00 — 12:20	Andreia Dionisio (Portugal)	On the globalization of the stock market: An application of Granger causality, mutual information and SSA to the G7
12:30 — 12:50	Jiawei Zhang (China)	A study on China's business cycle based on SSA
Lunch		
2:00 — 2:30	Saeid Sanei (UK)	Signal separation, extraction, and restoration from single channel signals by SSA; applications to biomedical data
2:40 — 3:00	Werner Mueller (Austria)	Prediction of steel prices: a comparison between a conventional regression model and MSSA
3:10 — 3:30	Paulo Ferreira (Portugal)	Long-range correlations for stock indexes
Tea, Coffee		
4:00 — 6:00	SSA Lab Session	

Day 3: September 22, 2010

Applications of SSA in other areas

Time	Speaker	Title
10:00 — 10:30	Alain de Cheveigné (France)	SSA-based multichannel signal analysis and denoising
10:40 — 11:10	Valentina Moskvina (UK)	Signal processing in genome-wide association studies
Tea, Coffee		
11:30 — 12:20	Elias Dana (Spain)	The use of SSA for managing invasive species
12:30 — 12:50	Haibin Xie (China)	Iteration-based SSA forecasting: An application to Chinese GDP
Lunch		
2:00 — 4:00	Discussion session	