Workshop on Characterizing Interactions in Complex Systems

Program

Wednesday 6.11.2019

Time	Program		
10:00	Registration		
10:30	Opening words		
11:00	Holger Kantz	Max Planck Institute, Dresden	Power law error growth in multi-hierarchical chaotic systems – a dynamical mechanism for finite prediction horizon
11:45	Dimitris Kugiumtzis	Aristotle University of Thessaloniki	Dimension Reduction for Causality in High-dimensional Time Series
12:30	Lunch		
14:00	Lionel Barnett	University of Sussex	Granger Causality and Nonlinear Dynamics - A personal perspective and some future directions
14:45	Bjarte Hannisdal Kristian A. Haaga David Diego	University of Bergen	Making transfer entropy work: new causality methods for short and noisy time series
15:30	Coffee break		
16:00	Jakub Kořenek	Czech Acad. Sci	Causal Network Discovery by Iterative Conditioning
16:25	Anna Pidnebesna	Czech Acad Sci	Brain Network Analysis By Mixture Component Inference Deconvolution
16:50	Martina Chvosteková	Slovak Acad Sci	Testing linear Granger causality
17:15	Coffee break		
17:45	Kristian A. Haaga	University of Bergen	Using CausalityTools.jl on time series with uncertainty
18:30	Reception		

Thursday 7.11.2019

Time	Program		
9:00	Coffee morning		
9:30	Anna Krakovská	Slovak Acad Sci	Causal analysis in reconstructed state spaces
10:15	David Hartman	Czech Acad Sci	Nonlinear obstacles in construction of stock networks
11:00	Coffee break		
11:30	Alejandro Tejedor	Max Planck Institute, Dresden	Diffusion Dynamics on Directed Multiplex Networks: The emergence of an optimal coupling and a new regime of superdiffusion
11:55	Maryam Zamani	Max Planck Institute, Dresden	Evolution and Transformation of Knowledge over the Sphaera Corpus: A Network Study
12:20	Benjamin Wahl	University of Oldenburg	Granger causality of diffusion processes - effects of non-linearity and non-trivial noise
12:45	Lunch		
14:15	Milan Paluš	Czech Acad Sci	Causality, time scales and time reversal
15:00	Coffee break		
15:15	General discussion		
16:15	Final remarks		
16:25	Meeting closed		