

Symposium on Network Analysis in Natural Sciences and Engineering

part of
AISB'06: Adaptation in Artificial and Biological Systems
Bristol, UK

– Preliminary Program –

Wednesday, April 5th 2006



09:30 – 10:30	Invited Talk: Network Analysis and Dynamic Conflict Ulrik Brandes (University of Konstanz, Germany)
10:30 – 11:30	Information Networks Statistical Analysis of Dynamic Graphs Xiaomeng Wan, Jeannette Janssen, Nauzer Kalyaniwalla and Evangelos Milios (Dalhousie University Halifax, Canada) Towards Associative Information Access Michael Berthold und Andreas Nürnberger (Universität Konstanz, Otto-von-Guericke-Universität Magdeburg, Germany)
11:30 – 12:00	Coffee Break
12:00 – 13:30	Analyzing Dynamic Communities and Graphs Generating networks with realistic properties: The topology of locally evolving random graphs Andreas Krause (University of Bath, UK) Community Structure in Group Living Animals David Mawdsley and Richard James (University of Bath, UK) Observing Dynamics in Community Structures Tanja Falkowski and Myra Spiliopoulou (Otto-von-Guericke-Universität Magdeburg, Germany)
13:30 – 14:30	Lunch Break
14:30 – 16:00	Network Theory General Classification of Networks Thomas Wilhelm, Jens Hollunder, Jong-Kwang Kim and Andreas Beyer (Leibniz Institute for Age Research - Fritz Lipmann Institute, Jena, Germany) Analytical and Numerical Results for Entrainment in Large Networks of Coupled Oscillators Peter Grindrod and Zhivko Stoyanov (Lawson Software Magdalen Centre, University of Bath, UK) Network Entropy and Cellular Robustness Thomas Manke and Lloyd Demetrius (Max Planck Institute for Molecular Genetics, Germany and Harvard University, Cambridge, USA)
16:00 – 17:00	Poster Session with Coffee A Discovery Method of Research Communities Ryutaro Ichise, Hideaki Takeda and Taichi Muraki (National Institute of Informatics and TriAx Corporation, Japan) Effects of Dimensionality over Cooperation Dynamics Ivette C. Martínéz and Klaus Jaffe (Universidad Simon Bolivar, Venezuela) Network Analyses to Understand the Structure of Wikipedia Takeshi Yamada, Kazumi Saito and Kazuhiro Kazama (NTT Communication Science Laboratories, Kyoto, and NTT Network Innovation Laboratories, Tokyo, Japan) and other...
17:00 – 18:00	AISB Plenary Talk: Nigel Franks
18:30 –	Informal Meeting of Participants for Dinner

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Thursday, April 6th 2006



09:30 – 10:30	AISB Plenary Talk: Owen Holland
10:30 – 11:00	Coffee Break
11:00 – 12:00	Invited Talk: Adaptation in Biological Networks: From the genome to ecosystems Barbara Drossel (TU Darmstadt, Germany)
12:00 – 13:00	Fault Tolerance in Communication Networks Fault tolerance and network integrity measures: the case of computer-based systems Peter Andras, Olusola Idowu and Panayiotis Periorellis (University of Newcastle, UK) Scale-free structure is not the best for the shortest path length and the robustness Yukio Hayashi and Jun Matsukubo (Japan Advanced Institute of Science and Technology, Kitakyusyu National College of Technology, Japan)
13:00 – 14:00	Lunch Break
14:00 – 15:30	Gene and Protein Interaction Networks Clustering Coefficients for Weighted Networks Gabriela Kalna and Desmond J. Higham (The University of Strathclyde, Glasgow, UK) Protein interaction network analysis reveals the importance of proteins with low degree of connectivity in neurodegenerative diseases Joaquín Goñi, Francisco J. Esteban, Nieves Vélez de Mendizábal, Jorge Sepulcre, Sergio Ardanza-Trevijano, Pablo Villoslada (University of Navarra, University of Jaén, University of the Basque Country, Spain) Reconstruction of Flexible Gene-Protein Interaction Networks using Piecewise Linear Modeling and Robust Regression Ronald L. Westra, Ralf L.M. Peeters, Goele Hollanders and Karl Tuyls (Hasselt University, Belgium and Maastricht University, The Netherlands)
15:30 – 16:00	Coffee Break
16:00 – 17:30	Regulatory Networks Scale-free Paradigm in Yeast Genetic Regulatory Networks Inferred from Microarray Data Kevin Kontos and Gianluca Bontempi (Libre Bruxelles, Belgium) Evolving Genetic Regulatory Networks Performing as Stochastic Switches André Leier and Kevin Burrage (University of Queensland, Brisbane, Australia) Noise R Us: From Gene Regulatory Networks to WWW Margaritis Voliotis, Carmen Molina París, Liverpool B. Tanniemola and Netta Cohen (University of Leeds, UK)
17:30 – 18:00	Final Discussion and Farewell