

Workshop III: Random and Dynamic Graphs and Networks

Monday May 7, 2007

- 8:00–9:00 *Check-In/Light Breakfast (Hosted by IPAM)*
- 9:00–12:00 *Welcome and Opening Remarks*
- 9:00–9:50 **Mark Newman** (University of Michigan)
Methods for detecting and understanding the large-scale structure in networks
- 10:00–10:15 *Break*
- 10:15–11:05 **David Aldous** (University of California, Berkeley (UC Berkeley))
Probability and Spatial Networks
- 11:15–11:30 *Break*
- 11:30–12:20 **Johannes Berg** (Universität zu Köln)
Theory of adaptive regulatory networks
- 12:30–2:30 *Lunch (on your own)*
- 2:30–3:20 **Noam Berger** (University of California, Los Angeles (UCLA))
- 3:30–4:00 *Break*
- 4:00–4:50 **Sebastien Roch** (UC Berkeley)
Diffusion of Influence in Social Networks
- 5:00–6:30 *Poster Session & Reception*



Tuesday May 8, 2007

- 8:00–9:00 *Continental Breakfast*
- 9:00–9:50 **Massimo Vergassola** (Institut Pasteur)
Biomimetic searching strategies
- 10:00–10:15 *Break*
- 10:15–11:05 **Christian Borgs** (Microsoft Research)
First to Market is not Everything: Phase Transitions in Preferential Attachment with Fitness
- 11:15–11:30 *Break*
- 11:30–12:20 **Milena Mihail** (Georgia Institute of Technology)
Network Performance and Spectral Metrics
- 12:30–2:30 *Lunch (on your own)*
- 2:30–3:20 **David Alderson** (Naval Postgraduate School)
Diversity of Graphs with Highly Variable Connectivity
- 3:30–4:00 *Break*
- 4:00–4:50 **David Liben-Nowell** (Carleton College)
Greedy Search in Social Networks

Wednesday May 9, 2007

- 8:00–9:00 *Continental Breakfast*
- 9:00–9:50 **Alessandro Vespignani** (Indiana University)
The impact of mobility networks on the worldwide spread of epidemics
- 10:00–10:15 *Break*
- 10:15–11:05 **Matthew Jackson** (Stanford University)
Naive Learning in Social Networks: Convergence, Influence and the Wisdom of Crowds
- 11:15–11:30 *Break*
- 11:30–12:20 **Sid Redner** (Boston University)
On the Structure of Growing Networks
- 12:30–2:30 *Lunch (on your own)*
- 2:30–3:20 **Felix Reed-Tsochas** (University of Oxford)
Mechanisms for network contraction
- 3:30–4:00 *Break*
- 4:00–5:00 *Panel Discussion*

Thursday May 10, 2007

- 8:00–9:00 *Continental Breakfast*
- 9:00–9:50 **Jennifer Chayes** (Microsoft Research)
Convergent Sequences of Dense Graphs
- 10:00–10:15 *Break*
- 10:15–11:05 **Andrea Montanari** (Stanford University)
Reconstruction in Random Graphs and Random Combinatorial Problems
- 11:15–11:30 *Break*
- 11:30–12:20 **Sourav Chatterjee** (University of California, Berkeley (UC Berkeley))
Exponential families of random graphs
- 12:30–2:30 *Lunch (on your own)*
- 2:30–3:20 **John Doyle** (California Institute of Technology)
The architecture of robust networks
- 3:30–4:00 *Break*
- 4:00–4:50 **Stanley Wasserman** (Indiana University)
A Review of Statistical Models for Networks With a Focus on Imputation

Friday May 11, 2007

- 8:00–9:00 *Continental Breakfast*
- 9:00–9:50 **Thomas Liggett** (University of California, Los Angeles (UCLA))
Stationary Distributions for Exclusion Processes on \mathbb{Z}^d
- 10:00–10:15 *Break*
- 10:15–11:05 **Jeannette Janssen** (Dalhousie University)
Modelling self-organizing networks with a hidden metric
- 11:15–11:30 *Break*
- 11:30–12:20 **Filippo Menczer** (Indiana University)
A Day of Internet Life
- 12:30–2:30 *Lunch (on your own)*
- 2:30–3:20 **Raissa D'Souza** (University of California, Davis (UC Davis))
Preferential Attachment from Optimization
- 3:30–4:00 *Break*
- 4:00–4:50 **Walter Willinger** (AT&T Labs-Research)
On measuring and modeling engineered networks: The Internet as a case study

