



## The 1st Workshop on Information in Networks (WIN)

Friday September 25th

7:30-8:30 am **Breakfast and Opening Remarks**

8:30-10:00am **Session A**

*Session Chair: Arun Sundararajan*

**From Networks to Human Activity Patterns.** *Albert-László Barabási (University of Notre Dame and Northeastern University).*

**Social Attention.** *Bernardo Huberman (HP Labs).*

**Behavioral Experiments in Strategic Networks.** *Michael Kearns (University of Pennsylvania).*

10:00-10:30am **Coffee Break**

10:30-12:00pm **Session B**

*Session Chair: Foster Provost*

**Community Structure of Large Information Networks.** *Jure Leskovec (Stanford University).*

**Graph Mining: Patterns, Generators and Tools.** *Christos Faloutsos (Carnegie Mellon).*

**Reality Mining for Honest Signals, or, How Social Networks Network Best.** *Alex (Sandy) Pentland (MIT).*

12:15-1:45pm **Lunch and Poster Slam I**

1:45-3:00pm **Session C**

*Session Chair: Ron Burt*

**Distinguishing Influence Based Contagion from Homophily Driven Diffusion in Dynamic Networks.** *Sinan Aral (NYU Stern and MIT), with Lev Muchnik (NYU Stern), Arun Sundararajan (NYU Stern)*

**Audience Selection for On-line Brand Advertising: Privacy-friendly Social Network Targeting.** *Foster Provost (NYU Stern), with B. Dalessandro (Media Six Degrees), R. Hook (Coriolis Ventures), X. Zhang (NYU Stern), and A. Murray (Coriolis Ventures).*

**Spreading the Oprah Effect: The Diffusion of Exogenous Demand Shocks in Recommendation Networks.** *Arun Sundararajan (NYU Stern), with Eyal Carmi (Tel-Aviv University), Gal Oestreicher-Singer (Tel-Aviv University)*

3:00-3:30pm **Coffee Break**

3:30-5:00pm **Session D**

*Session Chair: Sinan Aral*

**Modeling and Optimizing Word of Mouth with Markov Logic.** *Pedro Domingos (University of Washington), with Anirudh Nath (University of Washington), Matt Richardson (University of Washington).*

**How Homophily affects Diffusion and Learning in Networks.** *Matthew O. Jackson (Stanford University), with Benjamin Golub (Stanford University).*

**Using the Web to do Social Science.** *Duncan Watts (Columbia University) .*

5:15-6:30pm **Parallel Session E KMC 3-50**

*Session Chair: Jon Kleinberg*

**How Consumer Networks' Acquisition and Acceleration Create Value for Firms.** *Eitan Muller (NYU Stern and Tel-Aviv University) , Barak Libai (Tel Aviv University), Renana Peres (Hebrew University and the Wharton School).*

**Networks, Information Flow and Information Worker Productivity.** *Erik Brynjolfsson (MIT) , Sinan Aral (NYU Stern and MIT), Marshall Van Alstyne (BU and MIT).*

**Literature Search through Mixed-Membership Community Discovery.** *Tina Eliassi-Rad (Lawrence Livermore National Laboratory) , Keith Henderson (Lawrence Livermore National Laboratory).*

**Parallel Session F KMC 3-65**

*Session Chair: Duncan Watts*

**Finding Structure in Dynamic Networks.** *Tanya Berger-Wolf , Mayank Lahiri, Chayant Tantipathananandh, and David Kemp (University of Illinois at Chicago, University of Southern California).*

**Finding Valuable Information Flows in Networks.** *Ching-Yung Lin (IBM T. J. Watson) , Zhen Wen (IBM T. J. Watson).*

**Networking on Twitter: A Case Study of a Networked Social Operating System.** *Barry Wellman (NetLab Sociology, University of Toronto) , Anatoliy Gruzd (Information Management, Dalhousie University), Yuri Takhteyev (Information, University of Toronto).*



6:30pm-8:00pm

Poster Session and Reception

**A Structural Model of Learning and Dynamics in Mobile Media Content: User Learning from Own Usage and Via Social Networks.** *Sang Pil Han (NYU Stern), Anindya Ghose (NYU Stern).*

**Duality of Social Structure and Cultural Structure: A Flexible Framework for Modeling Information in Networks.** *James G. Ennis (Tufts University).*

**Introducing Causality and Traceability in Word-of-Mouth Algorithms.** *Heath Hohwald (Telefonica Research), Enrique Frias-Martinez (Telefonica Research), Manuel Cebrián (Telefonica Research) and Nuria Oliver (Telefonica Research).*

**Law as a Seamless Web? Comparison of Various Network Representations of the United States Supreme Court Corpus (1791-2005).** *Michael J Bommarito II (University of Michigan), Daniel Martin Katz (University of Michigan), Jon Zelner (University of Michigan).*

**Link Prediction Based on Graph Topology: The Predictive Value of the Generalized Clustering Coefficients.** *Zan Huang (Pennsylvania State University).*

**Local Algorithms for Global Network Properties.** *Mickey Brautbar (University of Pennsylvania), Michael Kearns (University of Pennsylvania).*

**Modularity and Text Mining in the Political Blogosphere.** *Wojciech Gryc (University of Oxford).*

**Naive Learning in Social Networks and the Wisdom of Crowds.** *Benjamin Golub (Stanford University), Matthew O. Jackson (Stanford University).*

**Nudging Mechanisms for Technology Adoption.** *Jacomo Corbo (University of Pennsylvania), Yevgeniy Vorobeychik (University of Pennsylvania).*

**On Analyzing Multi-Modal Networks Using Tensors: An Application to Significance Computation.** *Nachiketa Sahoo (Carnegie Mellon University), Ramayya Krishnan (Carnegie Mellon University).*

**Optimal Marketing and Pricing over Social Networks.** *Vahab Mirrokni (Google Research).*

**Searching For Answers: Networks of Practice Among Public Administrators.** *Maria Christina Binz-Scharf (City College of New York and CUNY), David Lazer (Harvard University), Ines Mergel (Syracuse University).*

**Social Influence, Peer Visibility and Online Charitable Giving.** *Lauren Rhue (NYU Stern), Arun Sundararajan (NYU Stern).*

**Socio-Dynamic Discrete Choice on Networks.** *Elena R. Dugundji (Universiteit van Amsterdam).*

**The Future of Content: A Strategic Network Formation Perspective on New Business Models for News.** *Chris Dellarocas (Boston University), William Rand (University of Maryland).*

**The Influence of Network Structure on the Quality of Peer Produced Medical Information.** *Gerald C. Kane (Boston College), Sam Ransbotham (Boston College).*

**The Many Faces of Guilt-by-Association.** *Sofus A. Macskassy (Fetch Technologies).*

**The Networked Biased Voting Problem?** *Jinsong Tan (University of Pennsylvania), Michael Kearns (University of Pennsylvania).*

**Using Web 2.0 Collaboration Networks in Organisations to Uncover Reputation and Structure.** *Elizabeth M. Daly (IBM Dublin Software Lab).*



## Saturday September 26th

7:30-8:00am **Breakfast**

8:00-9:30am **Session G**

*Session Chair: Foster Provost*

**Meme-tracking, Diffusion, and the Flow of Information through On-Line Networks.** *Jon Kleinberg (Cornell University), with Lars Backstrom (Cornell University), Jure Leskovec (Stanford University), and David Liben-Nowell (Carleton College).*

**Robust Networks.** *Sanjeev Goyal (University of Cambridge).*

**The New Petri-Dish: Social Science Experiments on the Internet.** *Damon Centola (MIT).*

9:30-10:00am **Coffee Break**

10:00-11:30am **Session H**

*Session Chair: Sinan Aral*

**Bent Preferences: Re-Thinking Agency and Motivation in Social Networks.** *Ronald S. Burt (University of Chicago).*

**Information Flow in Trading Networks.** *Lada Adamic (University of Michigan), Celso Brunetti (University of Pennsylvania), with Jeffrey Harris (University of Delaware), Andrei Kirilenko (Commodity Futures Trading Commission).*

**Life in the Network: The Coming Age of Computational Social Science.** *David Lazer (Harvard University).*

11:45-1:15PM **Lunch and Poster Slam II**

1:15-2:30pm **Parallel Session I KMC 3-50**

*Session Chair: Rachel Kranton*

**Paying for Content or Paying for Community? Global and Local Network Externalities in Social Media Web Sites.** *Gal Oestreicher-Singer (Tel Aviv University), Lior Zalmanson (Tel Aviv University).*

**Networks, Complexity and Economic Development.** *César A. Hidalgo (Harvard University), Ricardo Hausmann (Harvard University).*

**Technology Shocks, Alliances, and Organizational Fields: Insights From the Global Technology Collaboration Network.** *Melissa A. Schilling (NYU Stern).*

2:30-3:00pm **Coffee Break**

3:00-4:30pm **Session K**

*Session Chair: Arun Sundararajan*

**Cooperative Behaviour Cascades in Human Social Networks.** *James Fowler (UC San Diego), with Nikolas Christakis (Harvard).*

**Stock vs. Flow: Social Structure and Incentives to Produce New Information.** *Rachel Kranton (Duke University).*

**The Length of Weak Ties.** *Michael Macy (Cornell University), with Nathan Eagle (Santa Fe Institute and MIT), and Rob Claxton (British Telecom).*

4:45-6:00pm **Parallel Session L KMC 3-50**

*Session Chair: Matthew Jackson*

**A Field Study on Matching with Network Externalities.** *Mariagiovanna Baccara (NYU Stern), Ayse Imrohorglu (University of Southern California), Alistair Wilson (NYU), Leeat Yariv (California Institute of Technology).*

**Bayesian Learning in Social Networks.** *Ilan Lobel (Microsoft Research), Daron Acemoglu (MIT), Munther Dahleh (MIT), Asu Ozdaglar (MIT).*

**Doubling Down or Reaching Out: High and Low Status Groups Activate Different Network Structures Under Job Threat.** *Edward Bishop Smith (University of Chicago), Tanya Menon (University of Chicago), Leigh Thompson (University of Chicago).*

**Parallel Session J KMC 3-65**

*Session Chair: Pedro Domingos*

**Forbidden to Simmelian Ties: Dynamics of Online Expertise Sharing Communities.** *Param Vir Singh, Ray Reagans, Ramayya Krishnan (Carnegie Mellon University).*

**Social Media Analytics: Channeling the Power of the Blogosphere for Marketing Insight.** *Prem Melville (IBM T. J. Watson), Vikas Sindhwani (IBM T. J. Watson), Richard Lawrence (IBM T. J. Watson).*

**Content-based Link Prediction for Patent Marketing.** *Claudia Perlich (IBM T.J. Watson), Grzegorz Swirszcz (IBM T. J. Watson), Rick Lawrence (IBM T.J. Watson).*

**Parallel Session M KMC 3-65**

*Session Chair: Christos Faloutsos*

**Friendprints: A Random Graph Approximation Framework for Re-Identification in Social Networks.** *Shaundra Hill (University of Pennsylvania), Akash Nagle (University of Pennsylvania).*

**A Pipelined Approach to Graph Identification.** *Lise Getoor (University of Maryland), Galileo Mark Namata (University of Maryland).*

**An Investigation of the Distributional Characteristics of Generative Graph Models.** *Jennifer Neville (Purdue University), Sebastian Moreno (Purdue University).*



6:30-8:00pm

Poster Session and Reception

**Behavioral Experiments in Decentralized Coordination.** *Yevgeniy Vorobeychik (University of Pennsylvania), Stephen Judd (University of Pennsylvania), Michael Kearns (University of Pennsylvania).*

**DAPA-10: Discovery and Analysis of Patterns and Anomalies in Time-Evolving Networks.** *Brian Thompson (Rutgers University), Tina Eliassi-Rad (Lawrence Livermore National Lab).*

**Effects of Structure on Networked Bargaining.** *Tammy Chakraborty (University of Pennsylvania), Michael Kearns (University of Pennsylvania), Sanjeev Khanna (University of Pennsylvania).*

**Funnel Influence Pattern Analysis For Dynamic Social Networks.** *James F. Hollander.*

**Homophily or Influence? Analysis of Purchase Decisions in a Social Network Context.** *Liye Ma (Carnegie Mellon University), Alan Montgomery (Carnegie Mellon University) and Ramayya Krishnan (Carnegie Mellon University).*

**Identifying Network Properties from Aggregate Data.** *William Rand (University of Maryland), Michael Trusov (University of Maryland).*

**Informal Networks of Innovation: Stability in 'Smallish' Worlds, the Presence of Actants, and Institutions in the Background.** *Mohammad Hossein Jarrahi (Syracuse University), Steve Sawyer (Syracuse University).*

**Network Analysis on the Largest Japanese SNS based on Link Classification.** *Junki Marui (University of Tokyo), Mikio Kato (Mixi Inc), Yutaka Matsuo (University of Tokyo), and Yuki Yasuda (Kansai University).*

**Network Horizon: An Information-Based View on the Dynamics of Network Positions and Performance.** *Otto R. Koppius (Erasmus University), Diederik W. van Liere (University of Toronto), and Peter H. M. Vervest (Erasmus University).*

**Network Transparency and Network Performance.** *Sarita Koendjibiharie (Erasmus University).*

**Networked Marketing.** *Alin Vana (Gutzwiller of University of St. Gallen).*

**Online Interaction Structure and Potential Purchase Intention.** *Jyun-Cheng Wang (National TsingHua University)*

**Recommendation Behaviour of Users in Social Networks.** *Katarina Stanoevska-Slabeva, Thomas Wozniak, Isabella Hoffend, Jana Ebermann (Institute for Media and Communications Management University of St. Gallen).*

**Social Network Analysis of an Online Professional Network.** *Guangying Hua (Bentley University), Dominique Haughton (Bentley University).*

**The Link Between Changes in Social Support and Changes in Job Satisfaction: An Investigation with the Sociometric Badge.** *Benjamin N. Waber (MIT), Alex "Sandy" Pentland (MIT).*

**The Use of Reciprocity to Build Reputation in Electronically Mediated Social Networks.** *Jeff Nickerson (Stevens Institute of Technology).*

**Understanding the Effects of Virtual Communities Information Sharing in Chronic Illness Acceptance and Quality of Life.** *Jose Esteves (Instituto de Empresa, Madrid, Spain), Victor Bohorquez (Instituto de Empresa, Madrid, Spain).*

**Web Spam in Social Media: A Case of Misinformation in Networks.** *Pang-Ning Tan (Michigan State University), Feilong Chen (Michigan State University), and Anil K Jain (Michigan State University).*

8:00pm-

WORKSHOP DINNER AND SOCIAL @ LEELA LOUNGE

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