



The 3rd Workshop on Information in Networks (WIN)

Friday, September 30th

7:30-8:30 am **Breakfast and Opening Remarks (KMC 5-50)**

8:30-10:00am **Plenary Session A (KMC 5-50)**

Session Chair: Arun Sundararajan
Collaborative Problem Solving in Networks. *Duncan Watts (Yahoo! Research).*

Competitive Contagion in Networks. *Michael Kearns (University of Pennsylvania).*

The Evolutionary Significance of Human Social Networks. *Nicholas A. Christakis (Harvard Medical School).*

10:00-10:45am **Coffee Break**

10:45-12:00pm **Parallel Session B (KMC 3-110)**

Session Chair: Michael Kearns

Executive Compensation, Fat Cats and Best Athletes. *Jerry Kim (Columbia Business School), Bruce Kogut (Columbia Business School), Jae-Suk Yang (Columbia Business School)*

News, Corporate Network and Price Discovery. *German Creamer (Stevens Institute of Technology), Yong Ren (Stevens Institute of Technology), Jeff Nickerson (Stevens Institute of Technology).*

Micro-Level Dynamics in Macro-Level Networks: Global Trade 1995-2008. *Wouter Vermeer (Erasmus University), Otto Koppius (Erasmus University)*

Parallel Session C (KMC 3-120)

Session Chair: Duncan Watts

Human Attention and Bias in Social Information Networks. *Scott Counts (Microsoft Research).*

Structural Holes and Information Overload: Experimental Evidence. *Jesse Chu-Shore (Northeastern University), David Lazer (Northeastern University) and Ethan Bernstein (Northeastern University)*

Leadership and Networks in Public Goods Provision: Evidence from lab in the field experiments in Uganda. *Delia Baldassarri (Princeton University)*

12:00-2:00pm **Lunch and Poster Slam I (KMC 5-50)**

2:00-3:45pm **Parallel Session D (KMC 3-110)**

Session Chair: Matthew Jackson

Information Sharing & Performance: Evidence from a Japanese Bank. *Marshall Van Alstyne (Boston University & MIT Sloan), Marco DiMaggio (MIT Economics Dept)*

Peer Effects and the Dynamics of Product Use. *Sean Taylor (NYU Stern) and Sinan Aral (NYU Stern)*

Trust, Reciprocity and the Strength of Friendship Ties: Experiments on an Online Social Network. *Ravi Bapna (University of Minnesota), Alok Gupta (University of Minnesota), Sarah Rice (University of Connecticut), Arun Sundararajan (NYU Stern)*

Loving Those Who Love Themselves: Narcissism and Changes in Network Centrality. *Brian Rubineau (Cornell Univ), Evan Polman (New York University)*

Parallel Session E (KMC 3-120)

Session Chair: Alessandro Vespignani

Distance Estimation for Very Large Networks using Mapreduce and Network Structure Indices. *Huseyin Oktay (Univ. of Massachusetts), A. Soner Balkir (Univ. of Chicago), Ian Foster (Univ. of Chicago), David Jensen (Univ. of Mass).*

Measuring Tie Strength in Implicit Social Networks. *Mangesh Gupte (Rutgers Univ) and Tina Eliassi-Rad (Rutgers Univ).*

Rethinking Network Structure. *Kristina Lerman (USC Information Sciences Institute), Rumi Ghosh (USC Information Sciences Institute)*

The Information Content of Network Measures. *Katharine A. Anderson (Carnegie Mellon University), Ross C. O'Connell (Carnegie Mellon University).*

3:45-4:30 **Coffee Break**

4:30-6:00pm **Plenary Session F (KMC 5-50)**

Session Chair: Sinan Aral

Time Scales and Contagion Processes in Complex Networks. *Alessandro Vespignani (Indiana University).*

Using Web Science to Understand and Enable 21st Century Networks. *Noshir Contractor (Northwestern University).*

Taming Complexity: Controlling Networks. *Albert-Laszlo Barabasi (Northeastern University and Harvard Medical School).*



6:00pm-7:30pm

Poster Session and Reception (Shimkin 1-100)

Revealed Preference in Networks. Robert Ackland (The Australian National University), Lingfei Wu (City University of Hong Kong).

Exploring Viral Incentive Systems for WOM Diffusion: A Randomized Field Experiment. Sinan Aral (NYU Stern) and Sean Taylor (NYU Stern)

Cooperation in Information Networks. Chris Arney (United States Military Academy) and Kathryn Coronges (United States Military Academy)

The Influences of Social Networks on Phishing Vulnerability. Kathryn Coronges (United States Military Academy), Ronald Dodge (United States Military Academy), Cort Mukina, Zachary Radwick, Joseph Shevchik (United States Military Academy)

Weather affecting mood via social network analysis. Lorenzo Coviello (UC San Diego), James H. Fowler (UC San Diego), Massimo Franceschitti (UC San Diego), Adam Kramer (Facebook, Inc.), Cameron Marlow (Facebook, Inc).

A Network Model of Frontier Capital Markets. Daniel Evans (Network Science Center) and Margaret Moten (Network Science Center).

Ranking stability and super-stable nodes in complex networks. Gourab Ghoshal (Northeastern Univ.) and Albert-Laszlo Barabasi (Northeastern Univ.).

Global and Local Diversity in Networks and Systemic Performance. Charles Gomez (Stanford University), David Lazer (Northeastern University and Harvard Kennedy School)

Geo-Social Targeting for Mobile Advertising. Foster Provost (NYU Stern) and David Martens (University of Antwerp).

Digital Access, Political Networks and the Diffusion of Democracy. Lauren Rhue (NYU Stern) and Arun Sundararajan (NYU Stern).

Pathways of peer influence: Networks and STEM career and major plans. Brian Rubineau (Cornell University), David Lazer (Northeastern University), Michael Neblo (Ohio State University), Shinwon Noh (Cornell University).

The Political Coloring of Corporate Boards: Network Dynamics of Director Selection and the Political Slant of Corporate Interests. Derek Ruths (McGill), Bruce Kogut (Columbia), Michael Conover (Indiana University), David Lazer (Northeastern)

Team Member Connectedness, Innovation, and Creativity in Open Source Collaborative Knowledge Networks. Ramanath Subramanyam (University of Illinois), Ali Tafti (University of Illinois), Mu Xia (Leavey School of Business)

Network Inference via Social Dimensions. Lei Tang (Yahoo! Labs).

Hidden Variable Tests to Identify Influence in Social Networks. Greg Ver Steeg (University of Southern California) and Aram Galstyan (University of Southern California)

Information Communities: Cohesive Groups in the Enron Email Network. Peter Pal Zubcsek (University of Florida), Imran Chowdhury (ESSEC) and Zsolt Katona (UC Berkeley).

Ripple Effects: Small-scale investigations into the sustainability of ocean education networks. R.F. Chen (Univ. of Mass Boston), S. M. Uzzo (Univ. of Mass Boston), R. Faux (Univ. of Mass Boston), C.B. Cramer, (Univ. of Mass Boston)

The emergence of local elite networks and political performance: - An econometric approach. Christian Henning (University of Kiel), Christian Assmann (University of Bamberg), and Johannes Hedtrich (University of Kiel)



Saturday, October 1st

7:30-8:30am **Breakfast (KMC 5-50)**

8:30am-10:00am **Plenary Session G (KMC 5-50)**

Session Chair: Foster Provost

Mining Billion-Node Graphs - Patterns and Influence Propagation. *Christos Faloutsos (Carnegie Mellon University).*

Diffusion of Microfinance. *Matthew Jackson (Stanford University).*

Diffusion of Catastrophic Risk in Financial Networks. *Vasant Dhar (NYU Stern School of Business).*

10:00am-10:45am **Coffee Break**

10:45am-12:30pm **Parallel Session H (KMC 3-110)**

Session Chair: Christos Faloutsos

The Structure of Online Diffusion Networks. *Sharad Goel (Yahoo! Research), Duncan J. Watts (Yahoo! Research), Daniel G. Goldstein (Yahoo! Research)*

Structure-Aware Trend Detection in Online Social Networks. *Ceren Budak (UC Santa Barbara), Divyakant Agrawal (UC Santa Barbara), Amr El Abbadi (UC Santa Barbara)*

Information Transfer in Social Media. *Aram Galstyan (University of Southern California) and Greg Ver Steeg (University of Southern California)*

Behavioral Conflict and Fairness in Social Networks. *Stephen Judd (Univ. of Pennsylvania), Michael Kearns (Univ. of Pennsylvania), Yevgeniy Vorobeychik (Sandia National Laboratories)*

Parallel Session I (KMC 3-120)

Session Chair: Vasant Dhar

The Need for Champions for Approximate Social Search. *Yves-Alexandre de Montjoye (MIT), Jesika Haria (MIT), Manuel Cebrian (MIT), and Alex (Sandy) Pentland (MIT)*

Detecting Overlapping Communities Using the Ground-truth Communities. *Jaewon Yang (Stanford University) and Jure Leskovec (Stanford University)*

Coevolution of Network Structure and Content. *Chun-Yuen Teng (Univ. of Michigan), Liuling Gong (Univ. of Michigan), Avishay Livne (Univ. of Michigan), Celso Brunetti (Univ. of Michigan), Lada Adamic (Univ. of Michigan)*

Linguistic Style Coordination in Online Social Networks. *Cristian Danescu-Niculescu-Mizil (Cornell University).*

12:30pm-2:30pm **Lunch and Poster Slam II (KMC 5-50)**

2:30-4:15pm **Parallel Session J (KMC 3-110)**

Session Chair: David Lazer

Closeness is a Many-Splendored Thing: Networked Individualism in Everyday Life. *Barry Wellman (Univ. of Toronto), Melissa Godbout (Univ. of Toronto), Tracy L.M. Kennedy (Univ. of Toronto) and Yu Janice Zhang (Univ. of Toronto).*

Social Media and the Networked Public Sphere. *Michael D. Conover (Indiana University), J. Ratkiewicz (Indiana University), B. Goncalves (Indiana University), M. Francisco (Indiana University), A. Flammini (Indiana University) & F. Menczer (Indiana University)*

Affirming Power vs. Confirming Identity: Stable Identities Enable the Cognitive Activation of Broad Networks in Times of Social Change. *Tanya Menon (Michigan) and Edward Bishop Smith (Michigan)*

Human Mobility and Social Networks. *Dashun Wang (NEU, Harvard), Dino Pedreschi (NEU, Univ of Pisa), Chaoming Song (NEU, Harvard), Fosca Giannotti (NEU, ISTI-CNR), and Albert-Laszlo Barabasi (NEU, Harvard)*

Parallel Session K (KMC 3-120)

Session Chair: Sanjeev Goyal

Overlapping Clustering: Minimizing Conductance and Distributed Computation. *Vahab Mirrokni (Google Research)*

Estimating Average Causal Effects under General Interference between Units. *Peter M. Aronow (Yale University) and Cyrus Samii (New York University)*

Hierarchical Models of High School Classroom Dynamics. *Christopher DuBois (Univ. of California, Irvine), Carter Butts (Univ. of California, Irvine), Daniel McFarland (Stanford Univ.), Padhraic Smyth (Univ. of California, Irvine)*

Fortune Monitor or Fortune Teller: Understanding the Connection between Interaction Patterns and Financial Status. *Wei Pan (MIT Media Lab), Nadav Aharony (MIT Media Lab), Alex (Sandy) Pentland (MIT Media Lab)*

4:15-5:00pm **Coffee Break (KMC 5-50)**

5:00-6:00pm **Plenary Session L (KMC 5-50)**

Session Chair: Arun Sundararajan

Network Cognition. *Sanjeev Goyal (University of Cambridge).*

Computational Social Science: What's Next? *David Lazer (Harvard University).*



6:00-7:30pm

Poster Session and Reception (Shimkin 1-100)

Stealing Reality: When Criminals Become Data Scientists. Yaniv Altshuler (MIT Media Lab), Nadav Aharony (MIT Media Lab), Yuval Elovici (Ben Gurion Univ.) Alex Pentland (MIT Media Lab), and Manuel Cebrian (MIT Media Lab).

Information Flow in Networks - Trendsetters, Bellwethers and Sheperd Dogs. Yaniv Altshuler (MIT Media Lab), Alex (Sandy) Pentland (MIT Media Lab)

Industry Structure & Its Determinants. Ayeh Bandeh-Ahmadi (University of Maryland).

Impact of Historical Information in Human Coordination. Manuel Cebrian (UC San Diego), Ramamohan Paturi (UC San Diego), and Daniel Ricketts (UC San Diego)

Feature Propagation in Idea Networks. Lixiu Yu (Stevens Institute of Technology), Yasuaki Sakamoto (Stevens Institute of Technology), Jeffrey V. Nickerson (Stevens Institute of Technology).

Catastrophe Prediction Via Estimated Network Autocorrelation. Ryan Compton (UCLA), Hankyu Moon (UCLA), and Tsai-Ching Lu (UCLA)

A Comparison of Social Network Analysis and Text Regression using Twitter Data. Drew Conway (Princeton Univ.) and John Myles White (Princeton Univ.)

Integrating Social Network Effects in Product Design. Dilek Gunnec (Univ. of Maryland), S. Raghavan (Univ. of Maryland)

Evolutionary Models and Cyber-replicas of Large Small Worlds. Silvio Lattanzi (Google Inc.), Alessandro Panconesi (Informatica, Sapienza Universita), D. Sivakumar (Yahoo! Research)

Computing Randomized Security Strategies in Networked Domains. Joshua Letchford (Duke University), Yevgeniy Vorobeychik (Sandia National Laboratories)

Control Centrality and Hierarchical Structure in Complex Networks. Yang-Yu Liu (Northeastern Univ.), Jean-Jacques Slotine (MIT), Albert-L aszlo Barabasi (Northeastern Univ.)

Localized Externalities and Peer-Pressure in Social Networks: Free-riding, Co-ordination and Efficiency. Ankur Mani (MIT), Iyad Rahwan (MIT), Alex (Sandy) Pentland (MIT)

Information contagion with Costly Communication. David McArthur (University of Maryland, College Park).

The Role of Local Topological Information in Viral Information Spreading. Victor M. Preciado (Univ. of Pennsylvania) and Ali Jadbabaie (Univ. of Pennsylvania).

Reidentification of Artists and Genres in KDD Cup 2011. Matthew J. H. Rattigan (Univ. of Mass Amherst).

Networking Work. Barry Wellman (Univ. of Toronto), Anatoliy Gruzd (Univ. of Toronto), Dimitrina Dimitrova (Univ. of Toronto), Zack Hayat (Univ. of Toronto), Mo Guang Ying (Univ. of Toronto), Diana Mok (Univ. of Toronto), and Xiaolin Zhuo (Univ. of Toronto).

Organizational Change Online: Birth and Death in Rapidly Changing Environments. Matthew Weber (Rutgers University).

8:00pm-

Workshop Dinner and Social @ Chinatown Brasserie

380 Lafayette Street