



## The 6th Workshop on Information in Networks (WIN)

Friday, October 2nd

7:45am-8:15am **Breakfast and Registration (KMC 5-50)**

8:15am-8:45am **Welcome**

8:45am-10:15am **Plenary Session A (KMC 5-50)**

*Session Chair: Sinan Aral*

**Serving a Billion Personalized Newspapers.** *Lars Backstrom (Facebook).*

**Distinction and Status Production on User-Generated Content Platforms: Understanding Social Dynamics in Online Fields.** *Natalia Levina (NYU Stern).*

**An Experimental Study of Team Size and Performance on a Complex Task.** *Duncan Watts (Microsoft Research).*

10:15am-10:45am **Coffee Break (KMC 5-50)**

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

*Session Chair: Tina Eliassi-Rad*

**Adaptive Seeding in Social Networks.** *Ashwinkumar Badanidiyuru (Google), Christos Papadimitriou (UC Berkeley), Aviad Rubinfeld (UC Berkeley), Yaron Singer (Harvard University), Lior Seeman (Harvard University).*

**Improving Information Spread through a Scheduled Seeding Approach.** *Alon Sela (Tel-Aviv University), Irad Ben-Gal (Tel-Aviv University), Alex "Sandy" Pentland (MIT Media Lab), Erez Shmueli (Tel-Aviv University).*

**Customer Referral Incentives and Social Media.** *Ilan Lobel (NYU Stern School of Business), Evan Sadler (Harvard University), Lav R. Varshney (University of Illinois at Urbana-Champaign).*

**Influence Maximization Revisited.** *Sinan Aral (MIT), Paramveer Dhillion (MIT).*

**Parallel Session C: Fascinating Mix I (KMC 3-120)**

*Session Chair: Jennifer Neville*

**Collective Opinion Spam Detection: Bridging Review Networks and Metadata.** *Leman Akoglu, (Stony Brook University), Shebuti Rayana, (Stony Brook University).*

**Enriching Incomplete Networks.** *Tina Eliassi-Rad (Rutgers University), Brian Gallagher (Lawrence Livermore National Laboratory), Ali Pinar (Sandia National Laboratory), Sucheta Soundarajan (Syracuse University).*

**Political Slant and Network Structure on Twitter.** *Jiye Baek (Boston University), Chrysanthos Dellarocas (Boston University), Jesse Shore (Boston University).*

**Understanding the Exploration of Design Space in Remix Networks.** *Jeffrey V. Nickerson (Stevens Institute of Technology), Yue Han (Stevens Institute of Technology).*

12:15pm-1:45pm **Lunch and Poster Slam I (KMC 5-50) (Foster)**

1:45pm-3:15pm **Plenary Session D (KMC 5-50)**

*Session Chair: Foster Provost*

**Global Diffusion via Cascading Invitations: Structure, Growth, and Homophily.** *Ashton Anderson (Microsoft Research).*

**Financial Linkages, Portfolio choice and Systemic Risk.** *Sanjeev Goyal (University of Cambridge).*

**Informational Braess Paradox: The Effect of Information on Traffic Congestion.** *Asu Ozdaglar (MIT).*

3:15pm-3:45pm **Coffee Break (KMC 5-50)**

3:45pm-5:00pm **Parallel Session E: Fascinating Mix II (KMC 3-110)**

*Session Chair: Michael Kearns*

**Assortativity Patterns in Multidimensional Attributed Networks: a Statistical Approach.** *Marios Kokkodis (Boston College), Dong Wei (University of Pittsburgh), Konstantinos Pelechrinis (Boston College).*

**GeoTense: Spotting Patterns in Geo-Social Networks with Tensors.** *Evangelos Papalexakis (Carnegie Mellon University), Christos Faloutsos (Carnegie Mellon University), Konstantinos Pelechrinis (University of Pittsburgh).*

**Collaborative Bayesian Filtering: Patterns and Methods.** *Kenton Murray (University of Notre Dame), Christos Faloutsos (Carnegie Mellon University), Alex Smola (Carnegie Mellon University), Alex Beutel (Carnegie Mellon University).*

**Look Both Ways: Direction and Dependence in Relational Data.** *Katerina Marazopoulou (UMass Amherst), David Jensen (UMass Amherst), David Arbour (UMass Amherst).*

**Parallel Session F: Crowds (KMC 3-120)**

*Session Chair: Jon Kleinberg*

**Conversing in Reflective Glory: Capturing Individual Responses to Group Outcomes.** *Wang Liao (Cornell University), Yu-Ru Lin (University of Pittsburgh), Drew Margolin (Cornell University).*

**The Danger of Opinion Leaders: How Centralization Undermines the Wisdom of Crowds.** *Joshua Becker (University of Pennsylvania), Natalie Herbert (University of Pennsylvania), Damon Centola (University of Pennsylvania), Devon Brackbill (University of Pennsylvania).*

**Collective Problem-Solving by Heterogeneous Agents in Network Environments.** *Michael Foley (Northeastern University), Christoph Riedl (Northeastern University).*

**Predicting Cultural Trends Using the Crowd.** *Alex Peysakhovich (Facebook), Annie Steele (Facebook), Sean J. Taylor (Facebook).*

5:00pm-5:30pm **Break**

5:30pm-6:30pm **Plenary Session G (KMC 5-50)**

*Session Chair: Arun Sundararajan*

**Team Performance and Test Scores.** *Jon Kleinberg (Cornell University).*

**Privacy for the Protected (Only).** *Michael Kearns (University of Pennsylvania).*



6:30pm-8:00pm

Poster Session and Reception (Shimkin 1-100)

**Enhancing Transparency and Control When Drawing Data-Driven Inferences About Individuals.** *Daizhuo Chen (Columbia University), Samuel P. Fraiberger (New York University), Robert Moakler (NYU Stern), Foster Provost (NYU Stern).*

**The Rich Club Phenomenon in the Networks of International Relations.** *Brad LeVeck (University of California), Iyad Rahwan (MIT), Edmond Awad (MIT).*

**Coordination, Exploration, and Collective Decisions.** *Joshua Becker (University of Pennsylvania).*

**Analytical Reasoning Task Reveals Limits of Social Learning in Networks.** *Dmytro Krasnoshtan (Masdar Institute), Azim Shariff (University of Oregon), Jean-François Bomefon (CNRS), Iyad Rahwan (MIT).*

**Overlap Between Google and Bing Web Search Results! Twitter to the Rescue?** *Rakesh Agrawal (Data Insights Laboratories), Behzad Golshan (Boston University), Evangelos Papalexakis (Carnegie Mellon University).*

**Predicting Ratings in Online Social Networks: Friends or the Crowd?** *Sepehr Assadi (University of Pennsylvania), Mina Tahmasbi (Princeton University), Zeinab Abbassi (Columbia University).*

**Leveraging Homophily to Infer Demographic Attributes.** *Jiejun Xu (HRL Laboratories), Tsai-Ching Lu (HRL Laboratories), Peter Li (NYU and HRL Laboratories).*

**Extracting Hierarchical Concept Networks with Collaborative Knowledge Bases.** *Yegin Genc (Manhattan College).*

**Blind Identification of Graph Filters with Sparse Inputs.** *Santiago Segarra (University of Pennsylvania), Antonio G. Marques (King Juan Carlos University), Alejandro Ribeiro (University of Pennsylvania), Gonzalo Mateos (University of Rochester).*

**Distinguishing Between Personal Preferences and Social Influence in Online Activity Feeds.** *Dan Cosley (Cornell University), Amit Sharma (Microsoft Research).*

**Limits of Friendship Networks in Predicting Epidemic Risk.** *Massimo Franceschetti (UC San Diego), Iyad Rahwan (MIT Media Lab), Lorenzo Coviello (MIT Media Lab).*

**Can Social Interactions Change the Brain? Analyzing Social Network Effects on Obesity and Related Co-Morbidities.** *Nana Zubeck (Univeristy of Kiel), Matthias Laudes (Univeristy of Kiel), Christian Henning (University of Kiel).*

**Who's Watching TV.** *Jessica Clark (NYU Stern).*

**Beyond the Theory of Complexity: Empirical Study of the Economic Complexity Index.** *Abdullah Almaatouq (MIT), Martin Saveski (MIT).*

**Modularity and Productivity in WikiProjects.** *Jeffrey V. Nickerson (Stevens Institute of Technology), Pinar Ozturk (Stevens Institute of Technology).*

**Novelty and Reuse in an Open Innovation Community.** *Jeffrey V. Nickerson (Stevens Institute of Technology), Harris Kyriakou (Stevens Institute of Technology).*

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**Saturday, October 3rd**

7:45am-8:15am	<b>Breakfast and Registration (KMC 5-50)</b>	
8:15am-9:45am	<b>Plenary Session H (KMC 5-50)</b>	
	<p><i>Session Chair: Arun Sundararajan</i></p> <p><b>Theory Informs Practice: Proofs and the Descriptive Insights They Offer.</b> <i>Nicole Immorlica (Microsoft Research).</i></p> <p><b>Gossip: Identifying Central Individuals in Networks and Information Diffusion Processes.</b> <i>Matthew Jackson (Stanford University).</i></p> <p><b>Antisocial Behavior in Online Discussion Communities.</b> <i>Jure Leskovec (Stanford University).</i></p>	
9:45am-10:15am	<b>Coffee Break (KMC 5-50)</b>	
10:15am-11:30am	<b>Parallel Session I: Networks and the Behavioral Sciences (KMC 3-110)</b>	<b>Parallel Session J: Communities (KMC 3-120)</b>
	<p><i>Session Chair: Matthew Jackson</i></p> <p><b>Natural Experiments in Online Social Network Assembly.</b> <i>Samuel Way (University of Colorado), Johan Ugander (Stanford), Aaron Clauset (University of Colorado), Abigail Jacobs (University of Colorado).</i></p> <p><b>Consumption and Participation on Social Media: Estimates from Meta-analysis with Instrumental Variables.</b> <i>Dean Eckles (MIT and Facebook), Alex Peysakhovich (Facebook).</i></p> <p><b>Personality, Homophily and Embeddedness.</b> <i>Samuel Fraiberger (NYU Stern), Carlos Herrera-Yague (TraitPerception, Inc.), Antonio Prada (TraitPerception, Inc.), Arun Sundararajan (NYU Stern).</i></p> <p><b>Tragedy of the Forum: Social Visibility Distorts Moral Decision-making and Suppresses Utilitarianism.</b> <i>Azim Shariff (University of Oregon), Jean-Francois Bonnefon (CNRS), Attila-Péter Tóth (Masdar Institute), Iyad Rahwan (MIT).</i></p>	<p><i>Session Chair: Michael Macy</i></p> <p><b>Misery Loves Company: Happiness and Communication in the City.</b> <i>Aamena Alshamsi (Masdar Institute UAE), Maryam Almezezi (Masdar Institute UAE), Vahan Babushkin (Masdar Institute UAE), Pai-Ju Chang (Masdar Institute UAE), Zakariyah Shoroye (Masdar Institute UAE), Attila P Toth (Masdar Institute, UAE), Iyad Rahwan (MIT and Masdar Institute, UAE), Edmond Awad (MIT).</i></p> <p><b>Testing for the Existence of a Representative Interest Actor.</b> <i>Robert Ackland (Australian National University).</i></p> <p><b>Mediation of Physician Information Network Structure through Insurance Design.</b> <i>Kimberley H. Geissler (Boston University), Keith M. Marzilli Ericson (Boston University), Benjamin Lubin (Boston University).</i></p> <p><b>Social Bridges in Community Purchase Behavior.</b> <i>Burçin Bozkaya (Sabanci University), Vivek K. Singh (MIT Media Lab and Rutgers University), Alex "Sandy" Pentland (MIT Media Lab), Yoshihiko Suhara (MIT Media Lab and Recruit Holdings Co., Ltd.), Xiaowen Dong (MIT Media Lab).</i></p>
11:45am-1:15pm	<b>Lunch and Poster Slam II (KMC 5-50) (Foster)</b>	
1:15pm-2:45pm	<b>Plenary Session K (KMC 5-50)</b>	
	<p><i>Session Chair: Sinan Aral</i></p> <p><b>The Reasonable Effectiveness of Roles in Networks.</b> <i>Tina Eliassi-Rad (Rutgers University).</i></p> <p><b>Information Diffusion On and Offline.</b> <i>Bruno Gonçalves (NYU Center for Data Science).</i></p> <p><b>Advanced Clustering for Network Experiments.</b> <i>Johan Ugander (Stanford University).</i></p>	
2:45pm-3:15pm	<b>Coffee Break (KMC 5-50)</b>	
3:15pm-4:30 pm	<b>Parallel Session L: Human Capital Networks (KMC 3-110)</b>	<b>Parallel Session M: Influence II (KMC 3-120)</b>
	<p><i>Session Chair: Sanjeev Goyal</i></p> <p><b>Information in the Job Application Graph.</b> <i>John Horton (NYU Stern).</i></p> <p><b>Writers, Designers, and Software Developers: Skill Networks and Measures of Complex Human Capital.</b> <i>Katharine Anderson (Carnegie Mellon University).</i></p> <p><b>Social Media Fingerprints of Unemployment.</b> <i>Alejandro Llorente (UC3M), Manuel Cebrian (NICTA), Esteban Moro (UC3M), Manuel Garcia-Herranz (UNICEF).</i></p> <p><b>Proximity to Software and Labor Inequality: Examining the Industry-level Network of Corporate Acquisitions.</b> <i>Pouya Rahmati (University of Illinois at Chicago), Ali Tafti (University of Illinois at Chicago), J. Christopher Westland (University of Illinois at Chicago).</i></p>	<p><i>Session Chair: Jure Leskovec</i></p> <p><b>Motivating Group Donation: Evidence from a Randomized Field Experiment.</b> <i>Guodong "Gordon" Gao (University of Maryland), Ginger Zhe Jin (University of Maryland and NBER), Tianshu Sun (University of Maryland).</i></p> <p><b>Participation vs. Effectiveness of Paid Endorsers in Social Advertising Campaigns: A Field Experiment.</b> <i>Christophe Van den Bulte (The Wharton School), Jing Peng (The Wharton School).</i></p> <p><b>Is Exercise Contagious? Evidence from a Global Natural Experiment.</b> <i>Sinan Aral (MIT Sloan School of Management), Christos Nicolaidis (MIT Sloan School of Management).</i></p> <p><b>Social Influence and Complex Contagion.</b> <i>David Lazer (Northeastern University), Team Telenor (Telenor, Oslo), Christoph Riedl (Northeastern University).</i></p>
4:45pm-6:15pm	<b>Plenary Session N (KMC 5-50)</b>	
	<p><i>Session Chair: Foster Provost</i></p> <p><b>On Demand Diffusion.</b> <i>David Lazer (Northeastern University).</i></p> <p><b>Can We At Least Agree on Science?</b> <i>Michael Macy (Cornell University).</i></p> <p><b>Sampling Attributed Networks From Generative Graph Models.</b> <i>Jennifer Neville (Purdue University).</i></p>	



6:15pm-7:45pm

Poster Session and Reception (Shimkin 1-100)

**The Effect of Network and Geolocation Measures on Business Ratings.** *Harris Kyriakou (Stevens Institute of Technology), Eirini Kapogli (Stevens Institute of Technology).*

**Towards Effective Information Diffusion on Social Media Platforms: A Dyadic Analysis of Network Embeddedness.** *Ashish Agarwal (University of Texas at Austin), Kartik Hosanagar (The Wharton School), Raghuram Iyengar (The Wharton School), Jing Peng (The Wharton School).*

**Using Friends as Sensors to Detect Global-Scale Contagious Outbreaks.** *Esteban Moro (UC3M), Manuel Cebrian (NICTA), Nicholas A. Christakis (Yale), James H. Fowler (UCSD), Manuel Garcia-Herranz (UNICEF).*

**Investigating Social Bias in Online Spaces: Using Bots to Penetrate Mutually Reinforcing Idea Networks on Twitter.** *Peter Krafft (MIT), Alex "Sandy" Pentland (MIT), Ye Eun Jeong (Wellesley College).*

**Discovering Construct Network Structure in Psychology Literature.** *Yegin Genc (Manhattan College), Asaf Beasley (Indiana University).*

**Pace of Change as Barrier to Imitation: Intellectual Property Protection in Open Innovation Communities.** *Samer Faraj (McGill), Mahmood Shafeie Zargar (McGill).*

**A Simple Model of Cascades in Networks.** *Yongwhan Lim (MIT), Asuman Ozdaglar (MIT), Alexander Teytelboym (University of Oxford)*

**Focused Clustering and Outlier Detection in Large Attributed Graphs.** *Leman Akoglu (Stony Brook University), Patricia Iglesias Sánchez (KIT), Emmanuel Müller (KIT), Bryan Perozzi (Stony Brook University).*

**Forecasting Volatility and Systemic Risk: an Economic Network Approach.** *German Creamer (Stevens Institute of Technology).*

**Understanding Product Reviews: Information Search in Online Review Systems.** *Yegin Genc (Manhattan College); Jie Ren (Fordham University).*

**Collaborative Consumption: Trust in Peer-to-Peer Online Marketplaces.** *Mareike Möhlmann (NYU Stern School of Business).*

**Convergence of Functionals of Pairwise-Stable Networks.** *Michael Leung (MIT).*

**K-cores in Time-evolving Co-authorship Graphs: A Case-study on DBLP.** *Sucheta Soundarajan (Syracuse University), Tina Eliassi-Rad (Rutgers University), Christos Faloutsos (Carnegie Mellon University), Priya Govindan (Rutgers University).*

**On Social Ties and Stability: An Agent-based Model of Informal Economies.** *Jakub Rojcek (Swiss Finance Institute and University of Zurich), Sharon Greenblum (University of Washington Seattle), Eloy Fisher (Universidad Católica Santa María La Antigua); Carolina Mattsson (Northeastern University).*

**Information Diffusion in Hyperlocal Networks: A Deep Dive in the Diffusion of Microfinance.** *Mostafa Mohsenvand (MIT), Martin Saveski (MIT), Hayley Hinsberger (University of Oklahoma).*

8:00pm-

Workshop Dinner and Social @ The Library at the Public Theater

425 Lafayette Street

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