



The Conference on Digital Experimentation (CODE@MIT)

Friday, October 10th

8:00-9:00am Breakfast and Opening Remarks (E62 Gallery, 100 Main Street)

9:00-10:45am Plenary Session A (E62-233)

Session Chair: Sinan Aral

A Brief History of Virtual Labs: From Small Worlds to Crisis Mapping. *Duncan Watts (Microsoft)* **The Impact of Deep Learning.** *Jeremy Howard (Khosla Ventures)*
Crowdphysics: Studies of Permeability in Spatiotemporal Networks of People. *Eric Horvitz (Microsoft)* **On the Roots of Privacy Concerns.** *Alessandro Aquisti (Carnegie Mellon Univ.)*

10:45-11:15am Coffee Break (E62 Gallery)

11:15-1:00pm Parallel Session B: "Advertising, Marketing and Demand" (E62-262)

Session Chair: Alessandro Aquisti

Proactive Customer Education, Customer Retention, and Demand for Technology Support: Evidence from a Field Experiment. *German F. Retana (INCAE Business School), Chris Forman (Georgia Institute of Technology), and D. J. Wu (Georgia Institute of Technology).*

Morphing Theory and Applications. *Gui Liberali (Erasmus Univ. and MIT), John Hauser (MIT), and Glen Urban (MIT).*

Tweets and Sales. *Shiyang Gong (Tsinghua Univ.), Juanjuan Zhang (MIT), Ping Zhao (Tsinghua Univ.), and Xuping Jiang (Tsinghua Univ.).*

The Cost of Annoying Ads. *Daniel G. Goldstein (Microsoft Research), R. Preston McAfee (Google Strategic Technologies), and Siddharth Suri (Microsoft Research).*

Targeting, Retargeting and the Effectiveness of Search Engine Advertising: Evidence from Randomized Field Experiments. *Michael Smith (Carnegie Mellon Univ.) and Rahul Telang (Carnegie Mellon Univ.).*

Parallel Session C: "Experimental Design & Methods I" (E62-276)

Session Chair: Duncan Watts

Mechanism Design for Data Science. *Shuchi Chawla (University of Wisconsin-Madison), Jason Hartline (Northwestern Univ. and Harvard Univ.), and Denis Nekipelov (Univ. of Virginia).*

Incentive-Compatible Experiment Design. *David C. Parkes (Harvard Univ.), Elery Pfeffer (Pursway, Inc.), Panos Toulis (Harvard Univ.), James Zou (Microsoft Research), and Guy Gildor (Pursway, Inc.).*

Design and Analysis of Experiments in Networks: Sufficient Conditions for Reducing Bias from Interference. *Dean Eckles (Facebook, Inc.), Brian Karrer (Facebook, Inc.), and Johan Ugander (Cornell Univ.).*

Protocols for Randomized Experiments to Identify Network Contagion. *A.C. Thomas (Carnegie Mellon Univ.) and Michael Finegold (Carnegie Mellon Univ.).*

Optimal Design of Experiment with Network-Correlated Outcomes. *Edoardo M. Airolidi (Harvard Univ.) and Guillaume W. Basse (Harvard Univ.).*

1:00-2:15pm Lunch (E62 Gallery)

2:15-4:00pm Parallel Session D: "Mobile Experiments" (E62-262)

Session Chair: Eric Horvitz

Mobile Trajectory-Based Advertising: Evidence From a Large-Scale Randomized Field Experiment. *Anindya Ghose (NYU Stern), Beibei Li (Carnegie Mellon Univ.), and Siyuan Liu (Carnegie Mellon Univ.).*

Real-Time Mobile Geo-Conquering Promotions. *Nathan Fong (Temple Univ.), Zheng Fang (Sichuan Univ.), and Xueming Luo (Temple Univ.).*

Hour-by-Hour Mobile Advertising Effectiveness From Two Field Experiments. *Bradley Baker (Temple Univ.), Zheng Fang (Sichuan Univ.), and Xueming Luo (Temple Univ.).*

Work-Family Boundaries in the Mobile Era: Field Experiments. *Xueming Luo (Temple Univ.), Andy Reinaker (Temple Univ.), Chee Wei Phang (Fudan Univ.), and Zheng Fang (Sichuan Univ.).*

Parallel Session E: "Collective Action" (E62-276)

Session Chair: Jeremy Howard

An Experimental Study of Collective Self-Organization in Crisis Mapping. *Andrew Mao (Harvard Univ. and Microsoft Research), Winter A. Mason (Facebook, Inc.), Siddharth Suri (Microsoft Research), and Duncan J. Watts (Microsoft Research).*

Networks and Innovation: A Computational Field Experiment. *Sharique Hasan (Stanford Univ.) and Rembrand Koning (Stanford Univ.).*

Visions, Entrepreneurial Adaptation and Social Networks: Evidence from a Randomized Experiment on a MOOC Platform. *Charles Eesley (Stanford Univ.) and Lynn Wu (Univ. of Pennsylvania).*

Patronage, Personalities, and Public Sector Performance: Experimental Evidence from Pakistan. *Michael Callen (Harvard Univ.), Saad Gulzar (NYU), Ali Hasanain (Lahore Univ. of Management Sciences), Yasir Khan (International Growth Centre), and Arman Rezaee (Univ. of California, San Diego).*

4:00-4:30pm Coffee Break (E62 Gallery)

4:30-6:00pm Plenary Session F (E62-233)

Session Chair: Sandy Pentland

Efficient Exponential Digital Experimentation. *John Langford (Microsoft)* **Measuring Ad Effectiveness.** *Hal Varian (Google)*
Do Crowds have the Wisdom to Self-Organize? Field Experimental Evidence on Team Formation in a Crowdsourcing Contest. *Karim R. Lakhani (Harvard Univ.)* **Volunteer Science: A Crowd Sourced Platform for Studying Human Behavior.** *David Lazer (Northeastern Univ.)*

6:00-7:30pm Fireside Panel on "Experimentation and Ethical Practice" and Reception (E51, Wong Auditorium and Ting Foyer, 2 Amherst Street)

Moderator: Sinan Aral

Esther Dyson (EDventure) *Michelle N. Meyer (Mt. Sinai)*
Leslie Meltzer (Univ. of Maryland) *Duncan Watts (Microsoft)*
Jonathan Zittrain (Harvard Univ.)



Saturday, October 11th

8:30-9:30am

Breakfast (E62 Gallery)

9:30-11:00am

Plenary Session G (E62-233)

Session Chair: Erik Brynjolfsson

Using Short-Term Experiments in a Long-Term World. *Susan Athey (Stanford Univ.)*

Lessons from Running Thousands of A/B Tests. *Ron Kohavi (Microsoft)*

Field Experiments on Online Advertising. *David Reiley (Google)*

Transforming Marketing Analytics in Consumer Focused Organizations. *Eric Anderson (Northwestern Univ.)*

11:00-11:30am

Coffee Break (E62 Gallery)

11:30am-1:15pm

Parallel Session H: "Social Influence Bias"
(E62-262)

Parallel Session I: "Experimental Design & Methods II"
(E62-276)

Session Chair: Ron Kohavi

Session Chair: Sendhil Mullainathan

Escaping the Herd: Evidence on the Need to Be Different in Social Networks from a Large Field Experiment. *Monic Sun (Boston Univ.), Xiaoquan (Michael) Zhang (Hong Kong Univ. of Science and Technology), and Feng Zhu (Harvard Business School).*

A Common Language for Online Experiments. *Eytan Bakshy (Facebook, Inc.), Dean Eckles (Facebook, Inc.), and Michael Bernstein (Stanford Univ.).*

Measuring and Mitigating Bias in Online Ratings: A Field Experiment. *Georgios Askalidis (Northwestern Univ.), Greg Stoddard (Northwestern Univ.), and Georgios Zervas (Boston Univ.).*

Design of Randomized Experiments in Networks. *Dylan Walker (Boston Univ.) and Lev Muchnik (Hebrew Univ.).*

The Value of Employer Reputation in the Absence of Contract Enforcement: A Randomized Field Experiment. *Alan Benson (Univ. of Minnesota), Aaron Sojourner (Univ. of Minnesota), and Akhmed Umyarov (Univ. of Minnesota).*

Can I Take a Peek? Continuous Monitoring of A/B Tests. *Leo Pekelis (Stanford Univ./Optimizely), David Walsh (Stanford Univ./Optimizely), and Ramesh Johari (Stanford Univ./Optimizely).*

Reputation Inflation in Online Marketplaces. *John J. Horton (NYU Stern).*

Using Negative Controls to Validate and Repair a Natural Online Experiment. *Daniel N. Hill (Integral Ad Science), Alan Hubbard (Univ. of California, Berkeley), and Kiril Tsemekhman (Univ. of California, Berkeley).*

Reporting Bias and Reciprocity in Online Reviews: Evidence From Field Experiments on Airbnb. *Andrey Fradkin (NBER), Elena Grewal (Airbnb, Inc.), David Holtz (Airbnb, Inc.), and Matthew Pearson (Airbnb, Inc.).*

Controlled, Large, Online Social Experiments: The CLOSE Platform. *Kiran Lakkaraju (Sandia National Labs), Brenda Medina (Sandia National Labs), Alisa N. Rogers (Sandia National Labs), Derek M. Trumbo (Sandia National Labs), Ann Speed (Sandia National Labs), and Jonathan T. McClain (Sandia National Labs).*

1:15-2:30pm

Lunch (E62 Gallery) and Poster Slam (E62-233)

2:30-4:15pm

Parallel Session J: "Viral Incentive Systems"
(E62-262)

Parallel Session K: "Experiments in Systems Design"
(E62-276)

Session Chair: Claudia Perlich

Session Chair: David Reiley

The Effect of Reward Quantification on Actual Program Participation. *Eleanor Putnam-Farr (MIT) and Jason Riis (Univ. of Pennsylvania).*

Is Social Network Platform Integration Valuable for an Online Service? A Randomized Field Experiment and Archival Data Analysis. *Michael Frutiger (Georgia Institute of Technology), Eric Overby (Georgia Institute of Technology), and D.J. Wu (Georgia Institute of Technology).*

Price Discounts and Peer Effects in Information Goods: Results from a Large Scale Organic in-Vivo Randomized Experiment. *Miguel Godinho de Matos (Carnegie Mellon Univ. and Catolica-Lisbon), Pedro Ferreira (Carnegie Mellon Univ.), and Rodrigo Belo (Carnegie Mellon Univ. and Catolica-Lisbon).*

The Effect of Website-Initiated Participation on Users' On-Site Behavior and Spending. *Lior Zalmanson (Tel Aviv Univ.) and Gal Oestreicher-Singer (Tel Aviv Univ.).*

Analyzing the Impact of Incentive Structure on the Diffusion of Mobile Social Games: A Randomized Field Experiment. *Ravi Bapna (Univ. of Minnesota), Alok Gupta (Univ. of Minnesota), JaeHwuen Jung (Univ. of Minnesota), and Soumya Sen (University of Minnesota).*

The Value of Fit Information in Online Retail: Evidence From a Randomized Field Experiment. *Santiago Gallino (Dartmouth College) and Antonio Moreno (Northwestern Univ.).*

Experiment in Goal Setting for Citizen Science. *Corey Brian Jackson (Syracuse Univ.), Gabriel Mugar (Syracuse Univ.), Carsten Osterlund (Syracuse Univ.), Katie DeVries Hassman (Syracuse Univ.), and Kevin Crowston (Syracuse Univ. and National Science Foundation).*

People Who Liked This Study Also Liked: The Impact of Recommender Systems on Sales Volume and Diversity. *Dokyun Lee (Univ. of Pennsylvania) and Kartik Hosangar (Univ. of Pennsylvania).*

4:15-5:00pm

Coffee Break (E62 Gallery)

5:00-6:30pm

Plenary Session L (E62-233)

Session Chair: Sinan Aral

The Necessity for Causation is Overstated. *Sendhil Mullainathan (Harvard Univ.)* **Testing to Win: Experiments in Political Campaigns and Beyond.** *Dan Wagner (Civis)*

Correlation Rather than Causation? Incentive Issues in the Digital Advertising Industry. *Claudia Perlich (Dstillery)*



6:30-7:30pm

Poster Session and Reception (E62 Gallery)

Digital Democracy: Increasing Voter Turnout Using Email Messages and Facebook Advertisements. *Katherine Haenschen (Univ. of Texas at Austin).*

Using Field Experimentation to Understand Information Quality in User-generated Content. *Roman Lukyanenko (Florida International Univ.) and Jeffrey Parsons (Memorial Univ. of Newfoundland).*

How Optimal Are We At Fusing Decisions? *Aditya Vempaty (Syracuse Univ.), Gregory J. Koop (Syracuse Univ.), Amy H. Criss (Syracuse Univ.), and Pramod K. Varshney (Syracuse Univ.).*

Organization Vision - Experimentation on its Effective Communication. *Supriya Nambiar (Indian Institute of Management Kozhikode) and Gopalakrishnan Narayanamurthy (Indian Institute of Management Kozhikode). [Remote]*

An Integrated Web Experiment Tool Using Opensource Software. *Roger Seiler (Zurich Univ.) and Linda Miesler (Zurich Univ.).*

Behavioral Design & Continuous Experimentation in an Online Investment Advisor. *Daniel P. Egan (Betterment) and Patrick Burns (Betterment).*

Data Analytics Research in Public Universities. *Alan F. Smeaton (Dublin City Univ.)*

8:00pm

**Workshop Dinner and Social @ Commonwealth Cambridge
11 Broad Canal Way**