



# MIT CONFERENCE ON DIGITAL EXPERIMENTATION



## DAY 1: FRIDAY, NOVEMBER 10

8:00AM **BREAKFAST & REGISTRATION | OPENING REMARKS: DEAN ECKLES**

9:00AM **PLENARY SESSION 1 | SALON MIT**

**Session Chair:** Dean Eckles (MIT Sloan & CODE@MIT Organizer)

**Hema Yoganarasimhan** (University of Washington) "A Bias Correction Approach for Interference in Ranking Experiments"

**Susan A. Murphy** (Harvard University) "Did My Reinforcement Learning Algorithm Personalize?"

10:10AM **COFFEE BREAK**

10:35AM **PARALLEL SESSIONS A-B-C**

<b>A: The Practice of Experimentation (DR 5)</b> Chair: Susan A. Murphy	<b>B: Long Term Outcomes and Surrogates (DR 3+4)</b> Chair: Madhav Kumar	<b>C: Online Lab Experiments (DR 6)</b> Chair: Harang Ju
<p><b>"Misinterpretations of Common Data Visualizations in Online Experimentation Platforms"</b> Robert Neal (LaunchDarkly), Joni Rustulka (LaunchDarkly), Zachary Horne (University of Edinburgh)</p>	<p><b>"Targeting Long-Term Metrics by Optimizing Short-Term Proxies with Temporal Effects"</b> Sam Daulton (Meta), Max Balandat (Meta), Ben Letham (Meta), Eytan Bakshy (Meta)</p>	<p><b>"Comparing Traditional and LLM-based Search for Consumer Choice: A Randomized Experiment"</b> Sofia Eleni Spatharioti (Microsoft Research), David M. Rothschild (Microsoft Research), Daniel C. Goldstein (Microsoft Research), Jake M. Hofman (Microsoft Research)</p>
<p><b>"Estimating the Value of Evidence-Based Decision Making"</b> Alberto Abadie (MIT), Anish Agarwal (Amazon), Guido Imbens (Stanford), Siwei Jia (Amazon), James McQueen (Amazon), Serguei Stepaniants (Amazon)</p>	<p><b>"Long-Term Causal Inference with Imperfect Surrogates using Many Weak Experiments, Proxies, and Cross-Fold Moments"</b> Aurelien Bibaut (Netflix), Nathan Kallus (Netflix, Cornell), Simon Ejdemyr (Netflix), Michael Zhao (Netflix)</p>	<p><b>"Recommendation Algorithms and User Strategization: Minor Variations Lead to Large Behavioral Changes"</b> Andrew Ilyas* (MIT), Sarah Cen* (MIT), Hannah Li (Columbia), Jennifer Allen (MIT), David Rand (MIT), Aleksander Madry (MIT)</p>
<p><b>"Latent Space Preference Exploration for Bayesian Optimization with Many Outcomes"</b> Yujia Zhang (Cornell University)</p>	<p><b>"Surrogate Metrics as Filters"</b> Kenneth Hung (Meta), Michael Gill (Meta)</p>	<p><b>"Engagement, User Satisfaction, and the Amplification of Divisive Content on Social Media"</b> Smitha Milli (Cornell Tech), Micah Carroll (UC Berkeley), Yike Wang (UC Berkeley), Sashrika Pandey (UC Berkeley), Sebastian Zhao (UC Berkeley), Anca D. Dragan (UC Berkeley)</p>
<p><b>"Measure Twice, Treat Once: The Necessity of Descriptive Knowledge for Causal Generalization"</b> Kevin Munger (Penn State), Drew Dimmery (Data Science @ Uni Vienna)</p>	<p><b>"Evaluating the Surrogate Index as Decision-Making Tool Using 200 A/B at Netflix"</b> Vickie Zhang (ex-Netflix, Apple), Michael Zhao (Netflix), Anh Le (Netflix), Nathan Kallus (Cornell, Netflix)</p>	<p><b>"An Experimental Study of Prompt Engineering"</b> Mohammed Alsobay (MIT Sloan School of Management), Eaman Jahani (UC Berkeley Department of Statistics), Benjamin S. Manning (MIT Sloan School of Management), Hong-Yi TuYe (MIT Sloan School of Management), Joe Zhang (Stanford GSB), Christos Nicolaides (University of Cyprus), Siddharth Suri (Microsoft Research, AI), David Holtz (UC Berkeley Haas School of Business)</p>

11:40AM **LUNCH AND POSTER SLAM (DAY 1 PRESENTERS) | SALON MIT**

1	<b>Best of Three Worlds: Adaptive Experimentation for Digital Marketing in Practice</b>	Tanner Fiez (Amazon), Houssam Nassif (Amazon), Lalit Jain (UW/Amazon)
2	<b>A Practical Minimax Approach to Causal Inference with Limited Overlap</b>	Yuanzhe Ma (Columbia), Yian Huang (Columbia), Hongseok Namkoong (Columbia)
3	<b>A Bootstrap Method for Two-Sided Bipartite Experiments</b>	Jennifer Brennan (Google Research), Vahan Nanumyan (Zalando; work done while at Google), Jean Pouget-Abadie (Google Research), Kay Brodersen (Google)
4	<b>Inference for Synthetic Controls via Refined Placebo Tests</b>	Timothy Sudijono (Stanford), Lihua Lei (Stanford)
5	<b>The Effect of Alter Ego Accounts on A/B Tests for Social Networks</b>	Katherine Avery (University of Massachusetts Amherst), Amir Houmansadr (University of Massachusetts Amherst), David Jensen (University of Massachusetts Amherst)
6	<b>Expansion of Interference w.r.t. Tightness and a Linear Regression Estimator for Multiple Two-Sided Randomizations</b>	Nian Si (ChicagoBooth), Zhihua Zhu (Tencent), Zheng Cai (Tencent), Chenglong Li (Tencent), Ramesh Johari (Stanford)
7	<b>Video moves you: field experiment shows how demonstrator videos increase physical activity</b>	Christoph Riedl (Northeastern), Koen Pauwels (Northeastern)
8	<b>Evaluating Metric Tradeoffs in A/B Tests</b>	Jordan Schafer (Netflix), Michael Zhao (Netflix)
9	<b>Algorithmic Choice Architecture for Boundedly Rational Consumers</b>	Stefan Bucher (Max Planck Institute), Peter Dayan (Max Planck Institute)
10	<b>Generalized Objectives in Adaptive Experimentation: The Frontier between Within- and Post-Experiment Objectives</b>	Daniel Russo (Columbia)
11	<b>Virtualization Enables Sustained Blockchain Decentralization</b>	Harang Ju (MIT), Madhav Kumar (MIT), Ehsan Valavi (MIT), Sinan Aral (MIT)
12	<b>On the Limits of Regression Adjustment</b>	Daniel Ting (Meta), Kenneth Hung (Meta)
13	<b>From Augmentation to Decomposition: A New Look at CUPED in 2023</b>	Alex Deng (Airbnb), Luke Hagar (Waterloo), Nathaniel Stevens (Waterloo), Tatiana Xifara (Airbnb), Lo-Hua Yuan (Airbnb), Amit Gandhi (Airbnb)
14	<b>The Welfare Effects of Ad-Blocking</b>	Fengyang Lin (Cornell), Cristobal Cheyre (Cornell), Alessandro Acquisti (CMU)

15	<b>Improving Precision in Clustered Experiments</b>	Guido Imbens (Stanford University, Amazon.com), Lorenzo Masoero (Amazon.com), James McQueen (Amazon.com), Thomas Richardson (University of Washington, Amazon.com), Ido Rosen (Amazon.com), Suhas Vijaykumar (Amazon.com)
16	<b>When Is Heterogeneity Useless? An Analysis of Targeting Potential in Studies with Multiple Arms</b>	Anya Shchetkina (Wharton), Ron Berman (Wharton)
17	<b>An Experimental Analysis of The Negative Effect of Video on App Downloads</b>	Iris Somech, Shachar Reichman, Gal Oestreicher-Singer (Tel Aviv University)
18	<b>Understanding Algorithm Aversion: When and Why Do People Abandon AI After Seeing It Err?</b>	Yunhao "Jerry" Zhang (Berkeley Haas, MIT Sloan); Renee Gosline (MIT Sloan)
19	<b>Adaptive Switchback Experiment Design</b>	Salar Nozari (UTD), Dante Donati (Columbia)
20	<b>Unpacking Gender Bias in Sports Viewership</b>	Zihao Yang (CMU), Beibei Li (CMU)
21	<b>Emotion- versus Reasoning-Based Drivers of Misinformation Sharing: A Field Experiment Using Text Message Courses in Kenya</b>	Susan Athey (Stanford), Matias Cersosimo (Stanford), Kristine Koutout (Stanford), Zelin Li (MIT Sloan)

**1:10PM PLENARY SESSION 2 | SALON MIT**

**Session Chair: David Holtz** (UC Berkeley & CODE@MIT Organizer)  
**Martin Tingley** (Netflix) "A Tale of Complexity: Report from the Causal Inference and Digital Experimentation Roundtable (CIDER)"  
**Jean Pouget-Abadie** (Google Research) "Designing Experiments for Marketplaces and other Bipartite Graphs"

**2:20PM COFFEE BREAK**

**THANK YOU TO OUR 2023 PREMIERE SPONSOR:**



For Netflix employment opportunities scan the QR code with your smart device.

2:40PM PARALLEL SESSIONS D-E-F-G

<p><b>D: Platforms and Markets (DR 5)</b> Chair: David Holtz</p>	<p><b>E: Continuous Experimentation (DR 3+4)</b> Chair: Harang Ju</p>	<p><b>F: Bipartite Experiments (Salon MIT)</b> Chair: Jean Pouget-Abadie</p>	<p><b>G: Networks and Teams (DR 6)</b> Chair: Jorge Guzman</p>
<p><b>“Platform Vertical Integration and Consumer Welfare: Evidence from a Field Experiment”</b> Chiara Farronato (HBS), Andrey Fradkin (Boston University), Alexander Mackay (HBS)</p>	<p><b>“Experimental Design for Anytime-Valid, Design-Based Causal Inference on Multi-Armed Bandits”</b> Biyonka Liang, Iavor Bojinov</p>	<p><b>“Cluster-randomized Designs for YouTube Experiments”</b> Kevin Aydin, Jennifer Brennan, CJ Carey, Nick Doudchenko, Lina Lin, Yajun Peng, Jean Pouget-Abadie (all Google)</p>	<p><b>“Tendencies toward triadic closure: Field-experimental evidence”</b> Mohsen Mosleh (Exeter), Dean Eckles (MIT), David G. Rand (MIT)</p>
<p><b>“The Value of Platform Endorsement”</b> Mimansa Bairathi (UCL), Xu Zhang (London Business School), Anja Lambrecht (London Business School)</p>	<p><b>“Safe Testing in Large-Scale Experimentation Platforms”</b> Daniel Beasley (Vinted); Jevgenij Gamper (Vinted); Rianne de Heide (Vrije Universiteit Amsterdam)</p>	<p><b>“Online Learning in Matching Market through Matrix Completion”</b> Zhiyuan Tang (UTD Jindal), Wanning Chen (UW Foster), Kan Xu (ASU Carey)</p>	<p><b>“High-throughput experiments in small-group deliberation”</b> James P. Houghton (University of Pennsylvania) Duncan J. Watts (University of Pennsylvania)</p>
<p><b>“How Do Content Producers Respond to Engagement on Social Media Platforms?”</b> Simha Mummalaneni (University of Washington), Hema Yoganarsimhan (University of Washington), Varad Pathak (Independent Contributor)</p>	<p><b>“Should I Stop or Should I Go: Early Stopping with Heterogeneous Populations”</b> Hammad Adam (MIT), Fan Yin (Amazon), Mary Hu (Microsoft), Neil Tenenholtz (Microsoft Research), Lorin Crawford (Microsoft Research), Lester Mackey (Microsoft Research), Allison Koenecke (Cornell)</p>	<p><b>“Experimenting under Stochastic Congestion”</b> Shuangning Li (Harvard), Ramesh Johari (Stanford), Kuang Xu (Stanford), Stefan Wager (Stanford)</p>	<p><b>“Ego Group Partition: A Novel Framework for Improving Ego Experiments in Social Networks”</b> Lu Deng (Tencent), Jingjing Zhang (Tencent), Yong Wang (Tencent), Chuan Chen (Tencent)</p>
<p><b>“Dynamic Pricing in a B2B Market”</b> Alexander MacKay (Harvard Business School), Menna Hassan (Harvard Business School), Rembrand Koning (Harvard Business School).</p>	<p><b>“Multiple A/B testing with always-valid e-values”</b> Will Hartog (Stanford), Lihua Lei (Stanford)</p>	<p><b>“Randomization Inference for Bipartite Experiments”</b> Edvard Bakhitov (Meta), Liang Shi (Meta), Kenneth Hung (Meta)</p>	<p><b>“Approaches to Investigating Human-AI Teams: Transition from the Wizard of Oz to LLM-Powered Agents”</b> Vsevolod Suschevskiy (NU), Anoop Javalagi (NU), Sean Fitzhugh (ARL), Fumika Hoshi (NU), José Córdova (NU), Javier Garcia (ARL), Leslie A. DeChurch (NU), Noshir Contractor (NU)</p>

THANK YOU TO OUR 2023 EVENT SPONSORS:



Scan the QR codes below each logo for employment opportunities.

3:45PM **COFFEE BREAK**

4:00PM **PARALLEL SESSIONS H-I-J**

<b>H: The AI-Human Interface (DR 5)</b> Chair: David Holtz	<b>I: Bandits and Adaptive Experimentation (DR 3+4)</b> Chair: Widad Machmouchi	<b>J: Personalization and Experimentation (DR 6)</b> Chair: James McQueen
<p><b>"Explainable AI Helps Bridge the AI Skills Gap: Evidence from a Large Bank"</b> Selina Carter (CMU), Jonathan Hersh (Chapman)</p>	<p><b>"Learning Across a Network of Bandits"</b> Kan Xu (ASU Carey; Penn), Hamsa Bastani (Penn Wharton)</p>	<p><b>"Estimation and Inference under Algorithmic Interference on Content-Sharing Platforms"</b> Shichao Han (Tencent, Inc.), Yuchen Hu (Stanford University), Zhenling Jiang (University of Pennsylvania), Yong Wang (Tencent, Inc.), Ruohan Zhan (The Hong Kong University of Science and Technology)</p>
<p><b>"Human Favoritism, Not AI Aversion: People's Perceptions (and Bias) Toward Generative AI, Human Experts, and Human-GAI Collaboration in Persuasive Content Generation"</b> Yunhao "Jerry" Zhang (University of California, Berkeley; Massachusetts Institute of Technology), Renee Gosline (Massachusetts Institute of Technology)</p>	<p><b>"A/B Testing and Best-arm Identification for Linear Bandits with Robustness to Non-stationarity"</b> Zhihan Xiong (UW), Romain Camilleri (UW), Maryam Fazel (UW), Lalit Jain (UW), Kevin Jamieson (UW)</p>	<p><b>"Experimentation for User Interests Exploration for Online Platforms"</b> Garud Iyengar (Columbia), Yuanzhe Ma (Columbia), Jay Sethuraman (Columbia)</p>
<p><b>"AI Versus Human Decision-Making: Evidence from A Large-Scale Randomized Field Experiment"</b> Tong Shen (UConn), Chen Liang (UConn), Chunxiao Li (USTC), Shuliu Yuan (T3 Co.), Bin Gu (BU)</p>	<p><b>"Adaptive Neyman Allocation"</b> Jinglong Zhao (BU)</p>	<p><b>"A Study of "Symbiosis Bias" in A/B Tests of Recommendation Algorithms"</b> David Holtz (UC Berkeley Haas School of Business), Jennifer Brennan (Google Research), Jean Pouget-Abadie (Google Research)</p>
<p><b>"Large Language Model in Creative Work: The Role of Collaboration Modality and User Expertise"</b> Zenan Chen (UMN), Jason Chan (UMN)</p>	<p><b>"Adaptive Experimentation When You Can't Experiment"</b> Yao Zhao (UA), Kwang-Sung Jun (UA), Tanner Fiez (Amazon), Lalit Jain (UW/Amazon)</p>	<p><b>"Interference by Feedback Loops: Challenges in the Counterfactual Interleaving Design"</b> Zhihua Zhu (Tencent), Liang Zheng (Tencent), Zheng Cai (Tencent), Nian Si (ChicagoBooth)</p>

5:05PM **COFFEE BREAK**

5:20PM **PRACTITIONERS PANEL | SALON MIT**

Session Chair: Dean Eckles (MIT Sloan & CODE@MIT Organizer)  
 Widad Machmouchi (Principal DS Manager, Microsoft)  
 James McQueen (Principal Applied Scientist, Amazon)  
 Tushar Shanker (Director of Data, Grow Therapy)  
 Wenjing Zheng (Tech Lead Ecosystem Data Science, Roblox)

6:30PM **NETWORKING RECEPTION AND POSTER SESSION**

THANK YOU TO OUR 2023 RECEPTION SPONSOR:



Scan the QR code for Eppo employment opportunities.

**DAY 2: SATURDAY, NOVEMBER 11**

**8:00AM BREAKFAST & REGISTRATION | OPENING REMARKS: DAVID HOLTZ**

**9:00AM PLENARY SESSION 3 | SALON MIT**

**Session Chair:**David Holtz (UC Berkeley & CODE@MIT Organizer)  
**Annie Franco** (Meta) “Assessing the Impact of Social Media Affordances on Political Attitudes and Behavior during the US 2020 Election”  
**Jorge Guzman** (Columbia University & NBER) “Climate Change Framing and Innovator Attention”

**10:10AM COFFEE BREAK**

**10:25AM PARALLEL SESSIONS K-L-M-N**

<b>K: Health &amp; Education (DR 5)</b> Chair: Benjamin Manning	<b>L: Experimentation in Markets (Salon MIT)</b> Chair: Hannah Li	<b>M: Misinformation and Polarization (DR 6)</b> Chair: Brandon Stewart	<b>N: Privacy Preserving Experimentation and Partial Identification (DR 3+4)</b> Chair: Dean Eckles
<p><b>“Habit Formation with Digital Interventions in Education Technology”</b> Keshav Agrawal (Stanford), Susan Athey (Stanford), Ayush Kanodia (Stanford), Emil Palikot (Stanford)</p>	<p><b>“The Price is Right: Removing A/B Test Bias in a Marketplace of Expirable Goods”</b> Thu Le (Airbnb), Alex Deng (Airbnb)</p>	<p><b>“Does Exposure to Online Misinformation Affect Beliefs? Evidence from a Deactivation Experiment on WhatsApp”</b> Tiago Ventura (Georgetown University); Rajeshwari Majumdar (CSMaP-NYU); Jonathan Nagler (CSMaP-NYU); Joshua Tucker (CSMaP - NYU)</p>	<p><b>“Off-policy evaluation beyond overlap: partial identification through smoothness”</b> Samir Khan (Stanford), Martin Saveski (UW), Johan Ugander (Stanford)</p>
<p><b>“Conversations with a concern-addressing chatbot increase COVID-19 vaccination intentions among social media users in Kenya and Nigeria”</b> Molly Offer-Westort (University of Chicago), Leah Rosenzweig (University of Chicago)</p>	<p><b>“The Effects of Platform Suggested Pricing: Experimental Evidence from E-Commerce”</b> Jessica Fong (Michigan), Puneet Manchanda (Michigan), Yu Song (Michigan)</p>	<p><b>“Psychological underpinnings of partisan bias in tie formation on social media”</b> Mohsen Mosleh (Exeter, MIT); Cameron Martel (MIT); David G. Rand (MIT)</p>	<p><b>Privacy-preserving Quantile Treatment Effect Estimation for Randomized Controlled Trials”</b> Leon Yao (MIT), Paul Yiming Li (Apple), Jiannan Lu (Apple)</p>
<p><b>“ABSubscribe: LLM-Enhanced Authoring Tool for A/B Testing Educational Resources”</b> Mohi Reza (University of Toronto), Ilya Musabirov (University of Toronto), Joseph Jay Williams (University of Toronto)</p>	<p><b>“Cross-Unit Spillovers in A/B testing: Empirical Evidence from Ads”</b> Ronak Jain (Amazon.com/Havard), Stefan Hut (Amazon.com), Yao Pan (Amazon.com), Mahnaz Islam (Amazon.com)</p>	<p><b>“Social Influence and News Consumption”</b> Alex Moehring (MIT), Carlos Molina (MIT)</p>	<p><b>“Robust Partial Identification of Causal Effects under Misspecification”</b> Wenlong Ji (Stanford), Lihua Lei (Stanford), Asher Spector (Stanford)</p>
<p><b>“Math Education With LLMs: Peril or Promise?”</b> Harsh Kumar (University of Toronto), David M. Rothschild (Microsoft Research), Daniel C. Goldstein (Microsoft Research), Jake M. Hofman (Microsoft Research)</p>		<p><b>“Reducing misinformation sharing on social media using digital ads”</b> Hause Lin (MIT), Haritz Garro (Meta), Daniel Deisenroth (Meta), Adam Hughes (Meta), Jesse Shore (Meta), Dean Eckles (MIT), Nils Wernerfelt (Northwestern), Gordon Pennycook (Cornell), David Rand (MIT)</p>	<p><b>“Debiasing Treatment Effect Estimation for Privacy-Protected Data: A Model Auditing and Calibration Approach”</b> Ta-Wei Huang (HBS), Eva Ascarza (HBS)</p>



11:30AM **COFFEE BREAK**

11:45AM **FIRESIDE PANEL | SALON MIT**

**Session Chair:** David Holtz (UC Berkeley & CODE@MIT Organizer)  
**Payel Das** (Principal Research Staff Member and Manager, Trusted AI, IBM Research)  
**Xiao Ma** (Software Engineer, Google)  
**Daniel Rock** (Assistant Professor, Wharton School of the University of Pennsylvania)  
**Brandon Stewart** (Associate Professor, Princeton University)

1:00 PM **LUNCH AND POSTER SLAM (DAY 2 PRESENTERS) | SALON MIT**

22	<b>Open-Ended Metrics in Online Experiments: Interpretations and Sequential Testing</b>	Sebastian Ankargren (Spotify), Mattias Frånberg (Spotify), Mårten Schultzberg (Spotify)
23	<b>Balancing Risk and Reward: An Automated Phased Release Strategy</b>	Yufan Li (Harvard), Jialiang Mao (LinkedIn), Iavor Bojinov (Harvard Business School)
24	<b>C-Learner: Constrained Learning for Causal Inference</b>	Tiffany (Tianhui) Cai (Columbia), Yuri Fonseca (Columbia), Kaiwen Hou (Columbia), Hongseok Namkoong (Columbia)
25	<b>Measuring the Impact of an Online Product Launch</b>	Jeffrey Wong (Airbnb), Amit Gandhi (Airbnb), Lingna Chai (Airbnb), Lynn Chao (Airbnb), Dima Kernasovskiy (Airbnb), Eric Aldrich (Airbnb), Thu Le (Airbnb)
26	<b>Artificial intelligence is ineffective and potentially harmful for fact checking</b>	Matthew R. DeVerna (Indiana University), Harry Yaojun Yan (Indiana University), Kai-Cheng Yang (Indiana University), Filippo Menczer (Indiana University)
27	<b>Empirical Bayesian estimation for shorter time to decision in randomized controlled trials</b>	Patrick Ding (Microsoft)
28	<b>Distributional Treatment Effects of Content Promotion: Empirical Evidence from an ABEMA Field Experiment</b>	Shota Yasui (CyberAgent), Tatsushi Oka (Keio), Undral Byambadalai (CyberAgent), Yuki Oishi (ABEMA)
29	<b>Value of Stratification in Cluster-Randomized Experiments</b>	Stefan Hut (Amazon.com), Blake Mason (Amazon.com), Mahnaz Islam (Amazon.com), Lledo Esquerria (Amazon.com)
30	<b>Accuracy prompts undermine the illusory truth effect: Evidence from professional content moderators</b>	Hause Lin (Cornell, MIT, Regina), Marlyn Thomas Savio (TaskUs), Xieyining Huang (TaskUs), Rachel Guevara (TaskUs), Dali Szostak (Google), Gordon Pennycook (Cornell, Regina), David Rand (MIT)
31	<b>Weighted Allocation Probability on Thompson Sampling (WAPTS): A Novel Algorithm for Sparse and Adaptive Contextual Bandits</b>	Haochen Song(University of Toronto), Pan Chen(University of Toronto), Bingcheng Wang(University of Toronto), Ilya Musabirov(University of Toronto), Yi Wang(University of Toronto), Joseph Jay Williams (University of Toronto), Ananya Bhattacharjee (University of Toronto)
32	<b>Conditional Independence Testing for Heterogeneous Treatment Effects</b>	David Arbour (Adobe Research), Drew Dimmery (Data Science @ Uni Vienna)

33	<b>An Adaptive Randomization Algorithm for Online Controlled Experiments</b>	Daxi Cheng, Huizhi Xie, Yaran Jin , Lu Zhang (Kuaishou Technology) Jie Zhou (Department of Economics, MIT)
34	<b>Efficient Inference for Heterogeneous Treatment Effects for Incremental Return on Investment and Incremental Profit Using Bayesian Multivariate Generalized Linear Models</b>	Anirudh Tomer (Booking.com), Klajdi Qirko (Booking.com), Shubham Agarwal (Booking.com), Matthew Weaver (Booking.com)
35	<b>No Gold Standard: observational methods in light of interference bias</b>	Lars Roemheld (Zalando), Justin Rao (Zalando)
36	<b>Policy Learning under Biased Sample Selection</b>	Lihua Lei (Stanford), Roshni Sahoo (Stanford), Stefan Wager (Stanford)
37	<b>State of Experimentation survey report 2023</b>	Iavor Bojinov (Harvard Business School), David Holtz (Berkeley), Ramesh Johari (Stanford), Sven Schmit (Eppo), Martin Tingley (Netflix)
38	<b>When and How Artificial Intelligence Augments Employee Creativity</b>	Xueming Luo (Temple); Nan Jia (USC); Zheng Fang (Sichuan University); Chengcheng Liao (Sichuan University)
39	<b>The Crowdless Future? How Generative AI is Shaping the Future of Human Crowdsourcing</b>	Leonard Boussioux (University of Washington, Foster Business School), Jacqueline Lane (Harvard Business School), Miaomiao Zhang (Harvard Business School), Vladimir Jacimovic (Harvard D <sup>3</sup> and ContinuumLab.AI), Karim Lakhani (Harvard Business School)
40	<b>Fast-Causal-Inference: A Causal Inference Tool at Scale</b>	Yong Wang(Tencent), Jingjing Zhang(Tencent), Tao Xiong(Tencent), Xudong Bai(Tencent), Yanyan Huang(Tencent), Chuan Chen(Tencent)
41	<b>Correcting Machine Learning Generated Variable Bias In Regression Models</b>	Jingwen Zhang (UW), Wendao Xue (UW), Yifan Yu (UT Austin), Yong Tan (UW)
42	<b>The Evolution of Discrimination in Online Markets</b>	Elizaveta Pronkina (Université Paris-Dauphine), Mike Luca (HBS)
43	<b>The Language That Drives Engagement: A Systematic Large-scale Analysis of Headline Experiments</b>	Akshina Banerjee (Ross School of Business), Oleg Urminsky (Booth School of Business)
44	<b>Shapley values for interpretable estimation of long-term treatment effects through surrogates</b>	Samir Khan (Stanford), David Ami Wulf (Etsy), Alex Tank (Etsy)
45	<b>Bias in the Metaverse: Gender and Racial Price Disparities in the NFT Marketplace</b>	Yuan Yuan (CMU), Xiao Liu (NYU), Kannan Srinivasan (CMU), Shunyuan Zhang (Harvard)
46	<b>Coopetition in Search Service between Existing AI and Emergent LLMs</b>	Seung Jong Lee (Arizona State University), Donghyuk Shin (Arizona State University), Seigyoung Auh (Arizona State University), Sang Pil Han (Arizona State University)



2:15PM **PARALLEL SESSIONS O-P-Q**

<b>O: Experimentation Under Interference (DR 3+4)</b> Session Chair: Hong-Yi Tu Ye	<b>P: Beyond Average Treatment Effects (DR 5)</b> Session Chair: Brandon Stewart	<b>Q: Generative AI and Large Language Models (DR 6)</b> Chair: Madhav Kumar
<b>“Quantifying the Effect of Interference on Platform Decisions”</b> Hannah Li (Columbia), Ramesh Johari (Stanford), Ruben Lobel (Airbnb), Anushka Murthy (Stanford), Gabriel Weintraub (Stanford)	<b>“Correcting Strategic Misreporting Behavior On Outcomes in Estimating Treatment Effect”</b> Wendao Xue (UW)	<b>“Silica Scientist: A Tool for Automated Causal Hypothesis Generation and Simulated Experimental Validation”</b> Benjamin S. Manning (MIT), Kehang Zhu (Harvard), John J. Horton (MIT & NBER)
<b>“Causal Inference under Interference Graph Misspecification”</b> Liang Shi (Meta), Dominic Coey (Meta), Kenneth Hung (Meta), Jacky Lao (Meta), Erik Gregory (Meta), Fan Fu (Meta)	<b>“Synthetic Combinations: A Causal Inference Framework for Combinatorial Interventions”</b> Abhineet Agarwal (UC Berkeley), Anish Agarwal (Columbia University), Suhas Vijaykumar (MIT)	<b>“Generative AI and Creative Work: Case of Copywriting”</b> Zanele Munyikwa (MIT), Erik Brynjolfsson (Stanford)
<b>“Data-Driven Switchback Design”</b> Ruoxuan Xiong (Emory), Alex Chin (Motif Analytics), Sean Taylor (Motif Analytics)	<b>“Why stop at an ATE? Partial identification of dose-response functions in algorithmic interventions”</b> Apoorva Lal (Netflix), Samir Khan (Stanford), Johan Ugander (Stanford)	<b>“The impact of AI-generated content on platform engagement: Examining the implications for performance and growth”</b> Wajeeha Ahmad (Stanford University)
<b>“Causal clustering: design of cluster experiments under network interference”</b> Davide Viviano (Harvard), Lihua Lei (Stanford), Guido Imbens (Stanford), Brian Karrer (Meta), Okke Schrijvers (Meta), Liang Shi (Meta)	<b>“A multi-cell experimental design to recover policy relevant treatment effects, with an application to online advertising”</b> Caio Waisman, Brett R. Gordon	<b>“Generative AI and Personalized Video Advertisements”</b> Madhav Kumar (MIT), Anuj Kapoor (IIM-A)
<b>“Efficient switchback experiments via multiple randomization designs”</b> Lorenzo Masoero (Amazon), Guido Imbens (Stanford), Ido Rosen (Amazon), James McQueen (Amazon), Thomas Richardson (University of Washington), Suhas Vijaykumar (Amazon)	<b>“Comparing Methods for Continuous Treatment”</b> Yifei Ding (UC Riverside), Meng Xu (Snap Inc.)	<b>“Spurring Entrepreneurial Performance with AI”</b> Nicholas G. Otis (Berkeley Haas), Rowan Clarke (Harvard Business School), Solene Delecourt (Berkeley Haas), David Holtz (Berkeley Haas), Rembrandt Koning (Harvard Business School)

3:35PM **COFFEE BREAK**

3:45PM **PLENARY SESSION 4 | SALON MIT**

**Session Chair: Dean Eckles** (MIT Sloan & CODE@MIT Organizer)  
**Peng Ding** (UC Berkeley) “Causal Inference in Network Experiments: Regression-Based Analysis and Design-Based Properties”  
**Hannah Li** (Columbia Business School) “When Traditional Power Analysis Falls Short – A Public Health Case Study”

5:00PM **NETWORKING RECEPTION AND POSTER SESSION**

6:00PM **ADJOURN**



# MIT CONFERENCE ON DIGITAL EXPERIMENTATION



## THANK YOU TO OUR 2023 ORGANIZERS:

- Sinan Aral
- Dean Eckles
- David Holtz
- John Horton
- Alex (Sandy) Pentland

## THANK YOU TO OUR 2023 TECHNICAL PROGRAM COMMITTEE:

- Jenny Allen
- Doug Guilbeault
- Madhav Kumar
- Hannah Li
- Benjamin Manning
- Alex Moehring
- Yuan Yuan

## THANK YOU TO OUR 2023 CODE@MIT PREMIERE SPONSOR:

# NETFLIX

## THANK YOU TO OUR 2023 CODE@MIT EVENT SPONSORS:



## 2023 CODE@MIT RECEPTION SPONSOR:



FOR SELECT CONFERENCE ABSTRACTS PLEASE SCAN QR CODE

