Event Agenda

American Causal Inference Conference organized by the Society for Causal Inference

Tue, May 14, 2024

8:30 AM - 12:30 PM Unlocking the Mysteries of Mixed Exposures: Targeted Learning for Robust Discovery and

Causal Inference in Epidemiology

Location: Municipal Speaker: David McCoy

8:30 AM - 12:30 PM A Hands-on Introduction to BART, BCF, and Other Bayesian Tree Ensembles for Applied

Causal Inference

Location: Superior Speaker: Jared Murray

1:00 PM - 5:00 PM Statistical methods for electronic health record data

Location: Municipal

Speakers: Yates Coley, Jennifer Bobb, Susan Shortreed

1:00 PM - 5:00 PM Introduction to data-driven selection of causal graphical models ("causal discovery")

Location: Superior Speaker: Dan Malinsky

1:00 PM - 5:00 PM Highly Adaptive Lasso and Adaptive TMLE in Causal Inference

Location: Federal

Speakers: Mark van der Laan, Rachael Phillips, Lars Van Der Laan

3:00 PM - 5:30 PM Registration

Location: Courtyard Foyer

Wed, May 15, 2024

8:00 AM - 9:00 AM Breakfast

Location: Madison Ballroom

8:30 AM - 10:30 AM Plenary Session - Causal Inference in the Trenches: Challenges and Opportunities

Location: Courtyard Ballroom

Speakers: Dylan Small, Xinran Miao, Karla Diazordaz, Luke Miratrix, Youmi Suk, Andrew Spieker, Jane Zhao,

Ronghui Xu, Sjoerd Beentjes, Sharon-Lise Normand, Hyunseung Kang, Luke Keele

10:30 AM - 11:00 AM Break

Location: Madison Ballroom

11:00 AM - 12:15 PM Machine Learning and Causal Inference

Location: Municipal

 $Speakers: Jared\ Murray,\ Jann\ Spiess, Asher\ Spector,\ Ying\ Zhou,\ Jikai\ Jin,\ Caleb\ Miles$

11:00 AM - 12:15 PM Causal Inference in Network

Location: Superior

Speakers: Dean Knox, Yilin Li, Fabrizia Mealli, Steven Wilkins-Reeves, Yufeng Wu, Panogiotis Toulis, Fei Fang

11:00 AM - 12:15 PM Weighting and covariate balancing methods in causal inference

Location: Federal

Speakers: Andrea Rotnitzky, Yige Li, Leonard Wainstein, Yihan Bao, Oscar Clivio, David Arbour

12:00 PM - 12:00 PM Poster Set Up

Location: Madison Ballroom

12:30 PM - 1:15 PM Challenges and careers in causal inference outside of academia

Location: Municipal

Speakers: Ryan Shyu, Jiwei He, Irina Degtiar, Ayal Chen-Zion, Joel Persson, Carrie Cihak

1:30 PM - 2:45 PM Long-Term Causal Inference

Location: Municipal

Speakers: Aurélien Bibaut, Guido Imbens, Amiremad Ghassami, Allen Tran, Xiaojie Mao

1:30 PM - 2:45 PM Challenges in nonparametric causal inference with rigorous theoretical guarantees

Location: Superior

Speakers: James Robins, Bikram Karmakar, Nilanjana Laha, Mila Sun, Rajarshi Mukherjee

1:30 PM - 2:45 PM Data Fusion: Recent advancements and applications in transporting effect estimates and

improving efficiency in estimation

Location: Federal

Speakers: Kara Rudolph, Sijia Li, Rachael Ross, Audrey Renson, Caleb Miles, Harsh Parikh

2:45 PM - 3:15 PM Break

Location: Madison Ballroom

3:15 PM - 4:30 PM Machine Learning and Causal Inference

Location: Municipal

Speakers: Edward Kennedy, Anna Guo, Matteo Bonvini, Vasilis Syrgkanis

3:15 PM - 4:30 PM Instrumental Variables

Location: Federal

Speakers: Hyunseung Kang, Zhaonan Qu, Rui Wang, Yinxiang Wu

3:15 PM - 4:30 PM Randomized Studies

Location: Superior

Speakers: Siyu Heng, Aurélien Bibaut, Michele Santacatterina, Yuhao Wang, Jinglong Zhao, David Bui

5:00 PM - 6:30 PM Poster Session 1

Location: Madison Ballroom

Thu, May 16, 2024

8:00 AM - 9:00 AM Breakfast

Location: Madison Ballroom

9:00 AM - 10:15 AM Recent Advancements in Causal Inference with Continuous Treatments

Location: Municipal

Speakers: Guanhua Chen, Edward Kennedy, Dehan Kong, Chan Park

9:00 AM - 10:15 AM Statistical innovations in causal inference with text as data: emerging trends and future

directions

Location: Superior

 ${\bf Speakers: Reagan\ Mozer, Alexander\ Volfovsky,\ Katherine\ Keith,\ Brandon\ Stewart}$

9:00 AM - 10:15 AM Towards Causal Machine Learning

Location: Federal

Speakers: Linbo Wang, Hui Lan, Jason Hartford, Rahul Krishnan, Mats Stensrud

10:30 AM - 11:00 AM Break

Location: Madison Ballroom

11:00 AM - 12:15 PM External Validity, Generalization, and Distributional Shifts

Location: Municipal

Speakers: Naoki Egami, Dominik Rothenhäusler, Ari Boyarsky, Melody Huang, Hoifung Poon, Hongseok Namkoong

11:00 AM - 12:15 PM Temporal Experimentation: From Static Designs to Full Adaptivity

Location: Superior

Speakers: Yuchen Hu, Ivana Malenica, Wang Chonghuan, Jinglong Zhao, Shuangning Li

11:00 AM - 12:15 PM Optimization Methods for Causal Discovery

Location: Federal

Speakers: Armeen Taeb, Jean Honorio, Tian Gao, Ignavier Ng

12:00 PM - 12:00 PM Poster Set Up

Location: Madison Ballroom

1:30 PM - 2:45 PM Data fusion for enhanced generalizability/transportability, efficiency, and heterogeneous

treatment effect estimation

Location: Municipal

Speakers: Xi Lin, Larry Han, Ellen Graham, Yuhang Zhang, Ilina Yozova

1:30 PM - 2:45 PM Differences-in-Differences and Panel Data

Location: Superior

Speakers: Anton Strezhnev, Beth Ann Griffin, Ye Wang, Zhu Shen, Zach Shahn, Apoorva Lal

1:30 PM - 2:45 PM Machine Learning and Causal Inference

Location: Federal

Speakers: Alex Luedtke, Axel Martin, Kaiwen Hou, Srikar Katta, Georgi Baklicharov, Chao Cheng

2:45 PM - 3:15 PM Break

Location: Madison Ballroom

3:15 PM - 4:30 PM Tackling the thorny problems of difference-in-differences

Location: Municipal

Speakers: Laura Hatfield, Nicholas Seewald, Gary Hettinger, Michael Jetsupphasuk, Brad Ross

3:15 PM - 4:30 PM How certain should we be? Modern methods for sensitivity analysis

Location: Superior

Speakers: Paul Zivich, Andy Shen, Chad Hazlett, Alec Mcclean, Jay Xu, Rui Hu

3:15 PM - 4:30 PM Heterogeneous Treatment Effects

Location: Federal

Speakers: Marco Carone, Abhineet Agarwal, Alexander Levis, Anna Guo, Jiaxin Yu

4:30 PM - 5:00 PM Business Meeting and Tom Ten Have Poster Announcement

Location: Courtyard Ballroom

5:00 PM - 6:30 PM Poster Session 2

Location: Madison Ballroom

Fri, May 17, 2024

8:00 AM - 9:00 AM Breakfast

Location: Madison Ballroom

9:00 AM - 10:15 AM Bayesian Analysis of Experiments

Location: Municipal

Speakers: Carlos Cinelli, Evangelos Dimitriou, Nicholas Irons, Rob Trangucci, Simon Ejdemyr

9:00 AM - 10:15 AM Addressing fundamental challenges in the identification and estimation of mediation effects

Location: Superior

Speakers: Ivan Diaz, Ang Yu, Xiao Liu, Brian Gilbert

9:00 AM - 10:15 PM Innovative Approaches to Randomized Trials

Location: Federal

Speakers: Ting Ye, Jennifer Bobb, Harsh Parikh, Tobias Freidling, Lihua Lei

10:30 AM - 11:00 AM Break

Location: Madison Ballroom

11:00 AM - 12:15 PM Measuring and Leveraging Heterogeneous Interference

Location: Municipal

Speakers: Samantha Dean, Yi Zhang, Abhishek Ananth, Shishir Adhikari

11:00 AM - 12:15 PM Recent advances in causal representation learning

Location: Superior Speakers: Biwei Huang, Bryon Aragam, Yixin Wang, Jiaqi Zhang, Ting Ye

11:00 AM - 12:15 PM **Design and Analysis of Complex Experiments**

Location: Federal

Speakers: Ruohan Zhan, Hannah Li, Tu Ni, Biyonka Liang, Jinglong Zhao