



EUROPEAN CAUSAL INFERENCE MEETING EUROCIM

Programme

11 - 13 April 2018
University of Florence

The conference will be held in the area of Florence called “Novoli”
Campus of Social Sciences
Via delle Pandette n. 9
Building D6 - “Aula Magna” ground floor



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Wednesday 11th April

Registration desk open from 8:30

09:15 – 09:30

Welcome address

Luigi Dei (President of the University of Florence)

Vanessa Didelez and **Stephen Burgess** (co-Chairs of the EuroCIM Steering Group)

09:30 – 10:30

Keynote 1 - **Donald B. Rubin** (Harvard University)

Essential concepts of causal inference - a remarkable history

Chair: Fabrizia Mealli

10:30 – 11:00

Coffee break

11:00 – 11:30

Invited Talk 1 - **Stephen Burgess** (University of Cambridge)

Model averaging in instrumental variable analysis for consistent and efficient estimation when a plurality of candidate instruments are valid.

Chair: Richard Emsley

11:30 – 12:30

Session 1 - **Instrumental Variables**

Chair: Richard Emsley

11:30 – 11:45

Hyunseung Kang (University of Wisconsin-Madison)

Oracle-optimal confidence intervals for causal effects in Mendelian randomization via two stage hard thresholding with voting

11:45 – 12:00

Apostolos Gkatzionis (University of Cambridge)

Selection bias in mendelian randomization

12:00 – 12:15

Jacqueline A. Mauro (Carnegie Mellon University)

Stochastic intervention on continuous instrument: Estimating the effects of visitation recidivism

12:15 – 12:30

Luke Keele (Georgetown University)

Data driven tuning parameters for matching with stronger instruments

12:30 – 14:00

Lunch

14:00 – 14:30

Invited Talk 2 - **Nathan Kallus** (Cornell University)

Generalized Optimal Matching for Inference and Policy Learning

Chair: Mark Gilthorpe



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14:30 – 15:30

Session 2 - Doubly Robustness

Chair: Mark Gilthorpe

14:30 – 14:45

Oliver Dukes (Ghent University)

High - dimensional doubly robust inference for regression parameters

14:45 – 15:00

Karla Diaz Ordaz (The London School of Hygiene & Tropical Medicine)

Data - adaptive doubly robust instrumental variable methods for treatment effect heterogeneity

15:00 – 15:15

Ingeborg Waernbaum (Umeå University)

Model misspecification and bias for inverse probability weighting and doubly robust estimators

15:15 – 15:30

Joseph Antonelli (Harvard T.H Chan School of Public Health)

Nonparametric bayes models for doubly robust causal inference for high-dimensional data

15:30 – 16:00

Coffee break

16:00 – 16:30

Invited Talk 3 - Edoardo Airoldi (Harvard University)

Model-assisted design of experiments in the presence of social network information

Chair: Rhian Daniel

16:30 – 17:30

Session 3 - Sequential Treatments

Chair: Rhian Daniel

16:30 – 16:45

Shaun Seaman (University of Cambridge)

Handling time -dependent confounding using a structural nested cumulative survival time

16:45 – 17:00

Michele Santacatterina (Karolinska Institutet)

Optimal balancing of time - dependent confounders for marginal structural models

17:00 – 17:15

Paul Clarke (University of Essex)

Estimating the causal effect of state transitions using structural mean models

17:15 – 17:30

Alessandra Pasquini (Sapienza University of Rome)

Mediation analysis synthetic control

17:30 – 19:00

Poster presentation 1 and wine reception

Thursday 12th April

Registration desk open from 9:00

09:30 – 10:30

Keynote 2 - Vanessa Didelez (Leibniz Institute, University of Bremen)
A note on causal mediation analysis with a survival outcome
Chair: Stephen Burgess

10:30 – 11:00

Coffee break

11:00 – 11:30

Invited Talk 4 - Luke Miratrix (Harvard Graduate School of Education)
Insights on Variance Estimation for Blocked and Matched Pairs Designs
Chair: Paul Clark

11:30 – 12:30

Session 4 - Longitudinal Data
Chair: Paul Clark

11:30 – 11:45

Michael Elliott (University of Michigan)
Penalized Spline of Propensity Methods for Treatment Comparisons in Longitudinal Treatment Settings

11:45 – 12:00

Thomas Klausch (VU University Medical Centre Amsterdam)
Bayesian inference about optimal treatment regimens using observational data

12:00 – 12:15

Beth Ann Griffin (RAND Corporation)
Choosing optimal dynamic treatment regime methods when analyzing observational data

12:15 – 12:30

Leah Comment (Harvard T.H. Chan School of Public Health)
Time-varying survivor average causal effects with semicompeting risks

12:30 – 14:00

Poster presentation 2 and lunch

14:00 – 14:30

Invited Talk 5 - Francesca Dominici (Harvard T.H. Chan School of Public Health)
Local Confounding Adjustment in Exposure Response Modeling
Chair: Alessandra Mattei

14:30 – 15:30

Session 5 - Overlap and Balance
Chair: Alessandra Mattei

14:30 – 14:45

Alexander D'amour (University of California, Berkeley)
Overlap in observational studies with high-dimensional covariates

14:45 – 15:00

David Hirshberg (Columbia University)
Augmented Minimax Linear Estimation: Generalizing Double-Robust Balancing Estimators

15:00 – 15:15

Sean Yiu (University of Cambridge)
Calibrated inverse probability of treatment weights by covariate balancing for marginal structural models

15:15 – 15:30

Rachel Nethery (Harvard T.H. Chan School of Public Health)
Estimating Population Average Causal Effects in the Presence of Non-Overlap: A Bayesian approach

15:30 – 16:00

Coffee break

16:00 – 16:30

Invited Talk 6 - Martin Huber (University of Fribourg)
Instrument-based estimation with binarized treatments: Issues and tests for the exclusion restriction
Chair: Nuala Sheehan

16:30 – 17:30

Session 6 - General Methodology
Chair: Nuala Sheehan

16:30 – 16:45

Røysland Kjetil (University of Oslo)
Causal interpretation in survival analysis

16:45 – 17:00

Mats Julius Stensrud (University of Oslo)
Marginal structural models for survival analysis in continuous time : theoretically appealing and practically feasible

17:00 – 17:15

Vo Tat-Thang (Ghent University and INSERM)
Rethinking meta-analysis: addressing problems of non-transportability when combining treatment effects across patient populations

17:15 – 17:30

Luca De Benedictis (University of Macerata)
Propensity score methods for causal inference in observational studies with network interference

19:30

Conference dinner

Friday 13th April

Registration desk open from 9:00

09:00 – 10:00

Keynote 3 - Michael Hudgens (University of North Carolina at Chapel Hill)
Causal Inference in the Presence of Interference
Chair: Vanessa Didelez

10:00 – 10:30

Coffee break

10:30 – 11:00

Invited Talk 7 - Fredrik Savje (Yale University)
Average treatment effects in the presence of unknown interference
Chair: Laura Forastiere

11:00 – 11:45

Session 7 - Interference and irregular designs
Chair: Laura Forastiere

11:00 – 11:15

Georgia Papadogeorgou (Harvard T.H. Chan School of Public Health)
Causal inference for interfering units with cluster and population level
treatment allocation programs

11:15 – 11:30

Kwonsang Lee (Harvard T.H. Chan School of Public Health)
Discovering effect modification and randomization inference in air pollution
studies

11:30 – 11:45

Enrico Rettore (University of Trento, FBK-IRVAPP and IZA)
On the perils of stacking thresholds in rd designs

11:45 – 12:00

Short break

12:00 – 12:30

Invited Talk 8 - Lorenzo Richiardi (University of Turin)
Disease subtypes in aetiological research
Chair: Michela Baccini



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12:30 – 13:15

Session 8 - High-dimensional data
Chair: Anna Gottard

12:30 – 12:45

Stijn Vansteelandt (Ghent University and The London School of Hygiene and Tropical Medicine)
How to obtain valid tests and confidence intervals for treatment effects after confounder selection?

12:45 – 13:00

Chris Kennedy (University of California, Berkeley)
Data-adaptive variable importance with cv-tmle

13:00 – 13:15

Sarasvati Bahadursingh (University of Oxford)
Challenges in estimating the causal effects of a complex multi-dimensional exposure

13:15 – 13:30

Closing Remarks and Prizes awarded

13:30 – 14:30

Lunch



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