samsi
NSF·Duke·NCSU·UNC

Data Science in the Social and Behavioral Sciences
Virtual Opening Workshop
January 5/11/12, 2021

SCHEDULE

Virtual – All times Eastern Standard Time (NY)

Tuesday January 5

8:45   Welcome and Opening Remarks – **David Banks** (SAMSI/Duke)
                             Co-chairs: **Ken Bollen** and **Peter Mucha** (UNC-CH)

Digital Data
Chairs: **Santiago Olivella** (UNC-CH), **Peter Mucha** (UNC-CH)

9-9:20   **Chris Bail** (Duke)
                             Using Bots and Linked Social Media Data to Study Political Polarization

9:30-9:50   **Richard Troiano** (U.S. Public Health Service)
                             Wrist Accelerometer Data from the National Health and Nutrition Examination Survey

10-10:20   **Laura Germine** (McLean Hospital and Harvard)
                             Dynamic Cognitive Assessment in Health and Disease

10:30-10:50   **Jukka-Pekka Onnela** (Harvard)
                             Smartphone-based Digital Phenotyping

11-11:15   Break

11:15-1:15   2020 Electoral Polling Panel Discussion
                             What went wrong? What alternatives do we have?
                             Chairs: **Ken Bollen** (UNC-CH), **Teresa Edwards** (UNC-CH)
                             Panelists: **Charles Franklin** (Marquette), **Sunshine Hillygus** (Duke) **Jon Krosnick**
                             (Stanford)

1:15-2   Break

2-3:15   Interview of **Robert Groves** (Georgetown) Director of the 2010 United States
                             Census. Interviewed by **Ken Bollen** (UNC-CH)

3:30-5   Working Group Formation
                             Chairs: **Ken Bollen** (UNC-CH), **Peter Mucha** (UNC-CH)
                             Open meeting to discuss possible spring semester working groups on topics
                             related to digital data. Individuals can suggest topics or volunteer to lead a working group.

5 pm   Adjourn

Monday January 11
Chair: **Ken Bollen** (UNC-CH)

8:45 Welcome and Opening Remarks – **Greg Forest, Ken Bollen**, **Peter Mucha** (UNC-CH)

SEMs, DAGs, and Causal Inference: Part 1
Chairs: **Amy Herring** (Duke), **Zachary Fisher**(UNC-CH)

9-9:20 **Fan Li** (Duke)
A Regression Discontinuity Design for Ordinal Running Variables: Evaluating Central Bank Purchases of Corporate Bonds

9:30-9:50 **Oscar Gonzalez** (UNC-CH)
Statistical Mediation Analysis from the Causal Inference and Structural Equation Modeling Perspectives

10-10:20 **Ilya Shpitser** (Johns Hopkins)
Identification and Estimation of Causal Parameters via a Modified Factorization of a Graphical Model

10:30-10:50 **Cameron McIntosh** (Employment and Social Development, Canada)
Let's Remain Flexible: Nonparametric Modeling in Causal Analysis

11-11:15 Break

SEMs, DAGs, and Causal Inference: Part 2
Chairs: **Ken Bollen** (UNC-CH), **Jean-Philippe Laurenceau** (Delaware)

11:15-11:35 **Michael Hudgens** (UNC-CH)
Causal Inference with Interference

11:45-12:05 **Bengt Muthén** (Mplus software)
Effect Estimation with Latent Variables

12:15-12:35 **Sophia Rabe-Hesketh** (UC Berkeley)
SEM with Extensions to Multilevel and Non-continuous Data

12:45-1:05 **Judea Pearl** (UCLA)
Deep Understanding through Structural Equation Models (SEM)

1:15-2 Break

SEMs, DAGs, and Causal Inference: Part 3
Chair: **Ken Bollen** (UNC-CH)

2-3:15 **James Heckman** (Chicago)
Econometric Causal Analysis

3:30-5 Working Group Formation
Chairs: **Ken Bollen** (UNC-CH), **Peter Mucha** (UNC-CH)
Open meeting to discuss possible spring semester working groups on topics related to SEMs, DAGs, and Causal Inference. Individuals can suggest topics or volunteer to lead a working group.

5 pm Adjourn

Tuesday, January 12

Networks and Neuroscience
Chairs: **Alana Campbell**, **Peter Mucha** (UNC-CH)

8:45-9:05	**Eric Kolaczyk** (Boston University) *Quantitative Methods for Understanding Coalescence and Fragmentation in Dynamic Networks of Epileptic Seizures*
9:10-9:30	**Emily Falk** (Penn) *Social Networks and the Brain*
9:35-9:55	**Sarah Muldoon** (U.Buffalo) *Mapping Systems to Graphs: challenges of modeling neuroimaging data*
10-10:20	**David Dunson** (Duke) *Structural Brain Connectomics: new mathematical representations & statistical inference methods*
10:25-10:45	**Jessica Cohen** (UNC-CH) *Network Neuroscience Insights into Developmental Disorders: Functional Brain Network Dysfunction in ADHD*
10:50-11:15	Break

Networks and Health
Chairs: **Jim Moody** (Duke University), **Peter Mucha** (UNC-CH)

11:15-11:35	**Ashton Verdery** (PennSt) *Inference from Social Network Samples*
11:40-Noon	**Brea Perry** (Indiana) *Leveraging Personal Social Network Data to Understand Social and Biological Mechanisms of Cognitive Aging*
12:05-12:25	**Sam Jenness** (Emory) *Statistical Approaches to Modeling Infectious Disease Epidemics across Temporal Contact Networks*
12:30-12:50	**Thespina "Nina" Yamanis** (American) *Social Influence and Diffusion Effects on Men's HIV Testing During a Randomized Controlled Intervention Trial in Tanzania*
12:55-1:15	**Krista Gile** (UMass) *Clustering Network Tree Data From Respondent-driven Sampling*
1:15-2	Break

Information Spread
Chairs: **Peter Mucha** (UNC-CH), **Diego Fregolente** (SAMSI)

2-2:20	**David Lazer** (Northeastern) *Patterns of Sharing Fake News in 2016 and 2020*
2:25-2:45	**Yu-Ru Lin** (Pitt) *Online Misinformation Consumption: the myth of typical consumers and eye appeal*

2:50-3:10	**Paul Resnick** (Michigan) *Survey Equivalence: A Procedure for Measuring Classifier Accuracy against Human Labels*
3:15-3:35	**Diego Fregolente** (SAMSI) *Competition and Spreading of Low and High Quality Information in Online Social Networks*
3:45-5	Working Group Formation Chairs: **Ken Bollen** (UNC-CH), **Peter Mucha** (UNC-CH) Open meeting to discuss possible working groups on topics related to networks.
5 pm	Adjourn