

# Workshop on Foundations of Causal Discovery

## Center for Formal Epistemology

**Carnegie  
Mellon  
University**  
Philosophy

September 22-23, 2018  
Baker Hall, A53 Steinberg Auditorium

Saturday, September 22  
Epistemology of causal assumptions

9:00-9:10	Opening Remarks by Peter Spirtes
9:10-10:25	Jim Woodward: Flagpoles, Anyone? Independence, Invariance and the Direction of Causation
10:25-10:45	coffee
10:45-12:00	Alexander Gebharder: Uncovering constitutive relevance relations in mechanisms
12:00-2:00	lunch
2:00-3:15	Cosma Shalizi: Lessons for causal discovery from Markov models
3:15-4:30	Hanti Lin: How to Tackle an Extremely Hard Learning Problem: Learning Causal Structures from Non-Experimental Data without the Faithfulness Assumption or the Like
4:30-5:00	coffee
5:00-6:15	Konstantin Genin: Progressive Methods for Causal Search

Sunday, September 23  
Epistemology of causal discovery methods

9:00-10:15	Caroline Uhler: From Causal Inference to Gene Regulation
10:15-10:45	coffee
10:45-12:00	Tom Claassen: Causal discovery from real-world data: relaxing the faithfulness assumption
12:00-2:00	lunch
2:00-3:15	Karthika Mohan: Graphical Models for Missing Data: Recoverability, Testability and Recent Surprises!
3:15-4:30	Jiji Zhang: SAT-based causal discovery of semi-Markovian models under weaker assumptions
4:30-5:00	coffee
5:00-6:15	Kun Zhang: Causal modeling, statistical independence, and data heterogeneity