

**MICHIGAN STATE UNIVERSITY**  
Department of Statistics and Probability

# **COLLOQUIUM**

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## **Philosophy of Science, Principled Statistical Inference, and Data Science**

**Tuesday, March 13, 2018**

**10:20 AM - 11:10 AM**

**Refreshments 10:00 AM**

**C405 Wells Hall**

### **Abstract**

Statistical reasoning and statistical inference have strong historical connections with philosophy of science. In this talk, the new paradigm of data-driven science is examined through comparison with principled statistical approaches. I will review the merits and shortcomings of principled statistical inference. I will offer some comments on post-selection inference, inference for black box algorithms, and a survey of future challenges.

*To request an interpreter or other accommodations for people with disabilities, please call the  
Department of Statistics and Probability at 517-355-9589.*