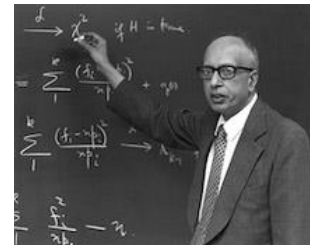


The University of Chicago, Department of Statistics

Bahadur Memorial Lectures

In honor of Raj Bahadur's fundamental contributions to statistics and to our department.



Michael A. Newton

Department of Statistics, University of Wisconsin

“Can clustering improve the performance of large-scale hypothesis testing?
Ideas from an empirical Bayes lab”

In Person

Thursday, April 7, 2022, at 3:30 PM

George Herbert Jones Laboratory, Room 303, 5747 S. Ellis Avenue

Reception *before* the seminar in Jones 304.

Abstract

Large-scale hypothesis testing and prioritization problems occur in many contemporary statistical applications. Well-developed methods and computational tools report the most interesting testing units subject to control on the rate of false discoveries, however performance improvements are possible. Motivated by examples from single-cell RNA-sequencing, antibody profiling, and brain imaging, I will review some recent empirical Bayesian approaches to this problem, with a focus on methods that modulate local false discovery rates using information from the clustering of samples or inference units.