

Stanford University
Department of Statistics

DEPARTMENTAL SEMINAR

4:30pm, Tuesday, April 23, 2019

*** New New Venue ***

Herrin Hall Room T175

Refreshments served at 4pm in Sequoia Lounge.

Speaker: Peter Hoff
Department of Statistical Science,
Duke University

Title: Mixed effects models for skeptics

Abstract:

Mixed effects models are used routinely to share information across groups and to account for data dependence. The statistical properties of such models are often quite good on average across groups, but may be poor for any specific group. For example, commonly used confidence interval procedures may maintain a target coverage rate on average across groups, but have a coverage rate near zero for a group that differs substantially from the others. In this talk, we review some basic mixed effects modeling tools, discuss their group-specific properties, and present some new tools for multiple testing and inference problems that permit information sharing across groups while controlling group-specific frequentist error rates.