Stanford University
Department of Statistics

DEPARTMENTAL SEMINAR

The Stanford/Berkeley Joint Statistics Colloquium
4:15pm, Tuesday, April 12, 2011
Sequoia Hall Room 200

Cookies served at 3:45pm, 1st Floor Lounge.

Speaker: Philip Stark, UC Berkeley

Title: Close enough for government work: risk-limiting post-election audits

Abstract:
How can we tell whether voting machines report the right winners of an election? Risk-limiting post election audits can help. Endorsed by the American Statistical Association, Common Cause, The League of Women Voters, and Verified Voting, risk-limiting audits have a guaranteed minimum chance of correcting wrong electoral outcomes. There have been seven risk-limiting audits so far, six in California and one in Colorado. California AB 2023, which requires an official pilot of risk-limiting audits, was signed into law in July, 2010, after unanimous bipartisan votes in both houses. I will discuss auditing as a sequential nonparametric test of the hypothesis that the mean of a bounded population is large; factors that affect efficiency and cost, including sampling designs and the limitations of voting systems; “transitive auditing,” which uses a shadow system to supplement the voting system of record; security, voter privacy, and transparency; as well as lessons learned conducting audits and working with elections officials and election integrity activists. If time permits, I’ll ramble about helping to get AB 2023 passed and the recent legal tangle in New York Senate District 7, which determined the balance of power in the NY Senate: two stories at the intersection of statistics, legislation, public administration, jurisprudence, and politics.