Decision Processes Colloquia

Monday, March 19, 2012
Where: JMHH 245
When: 12:00 noon to 1:20 PM

Uri Simonsohn
Associate Professor, Operations & Information Management
Wharton, University of Pennsylvania

P-curve: A Master Key to the File Drawer

We propose using the distribution of significant p-values for a set of findings, "p-curve", to assess the likelihood that such findings are false-positive, to assess if the findings were p-hacked, and to estimate a publication bias free effect size. We demonstrate p-curve with findings known to be reliable and unreliable, and with Monte-Carlo simulations, obtaining very encouraging results. Importantly, p-curve can aggregate across very diverse sets of findings to answer questions that current aggregation methods cannot, such as whether or not a particular institution, journal, or researcher is disproportionately likely to publish false-positive results.