THE UNIVERSITY OF CHICAGO

Computational and Applied Mathematics & Statistics Student Seminar

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Meta-Analysis of Nudge Data

MONDAY, November 14,
12-1pm
Jones Laboratory, Room 303

ABSTRACT

In this talk, we study meta-analysis data from the behavioral psychology literature on nudging. We estimate the rate of false positives among studies deemed significant at the 5% level, and propose a new default threshold for results in this area to be deemed statistically significant, roughly forty times smaller than the standard 0.05 cut-off. We argue that by using the smaller threshold, nudge researchers will control the rate at which they collectively make false discoveries so that on average only 10% of the studies that just barely reach the new threshold of statistical evidence is false positives. Alternatively, to target a 5% false positive rate among the field's least promising discoveries, the standard pvalue cut-off should be reduced by a factor of about a hundred. For a 20% false positive rate, we find that the cut-off should be reduced by a factor of about twelve, which roughly agrees with a more general suggestion made by Benjamin et. al. (2018) to reduce the cut-off from 0.05 to 0.005.