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Olmsted Hall 420
February 5th 2019
3:45-4:45pm

*Reception in Olmsted 1331
at 3:15 P.M.*



“SOME BAYESIAN AND PSYCHOMETRIC THOUGHTS ON THE REPRODUCIBILITY CRISIS”

For more information about this seminar, visit statistics.ucr.edu/colloquia.html

Abstract

In retrospect, it appears that there are many good explanations for the poor reproducibility of psychological studies. Poor research practice, publication bias, small samples, and over-interpretation all seem to occur regularly. I will discuss some of these issues from the perspective of Bayesian statistics (focusing on evidence considerations rather than a lexicographic decision rule); from the perspective of psychometrics (focusing on generalizability and robustness rather than one-off observations); and from the perspective of cognitive science (focusing on model building rather than hypothesis testing). I will suggest a few new approaches, both top-down and bottom-up and some more radical than others, that might improve our research practice.

Biography

Joachim Vandekerckhove (PhD 2009, University of Leuven, Belgium) is an Associate Professor at the University of California, Irvine, where he has appointments at the Department of Cognitive Sciences, Department of Statistics, and the Institute for Mathematical Behavioral Sciences. He has authored over 50 journal articles and book chapters and is the author of multiple popular software packages for cognitive model fitting and evaluation. His research interests include cognitive modeling, statistical inference, data fusion, psychometrics, meta-science, and the development of robust research methods that improve on classical methods with modern technologies. His Cognition and Individual Differences lab's website is www.cidlab.com.