LECTURE SERIES TRENDS IN STATISTICS



Department of Statistics and Data Science Faculty of Science

CHATTERJEE'S RANK CORRELATION: WHAT IS NEW?

ABSTRACT

In this talk, the speaker will provide an overview of the recent progress made in exploring Sourav Chatterjee's newly introduced rank correlation. The objective is to elaborate on its practical utility and present several new findings pertaining to (a) the asymptotic normality and limiting variance of Chatterjee's rank correlation, (b) its statistical efficiency for testing independence, and (c) the issue of its bootstrap inconsistency. Notably, the presentation will reveal that Chatterjee's rank correlation is root-n consistent, asymptotically normal, but bootstrap inconsistent - a rare phenomenon in the literature.





BIOGRAPHY

Fang Han is Associate Professor of Statistics at the University of Washington, he holds an adjunct appointment with the Department of Economics and is an affiliated investigator with the Fred Hutchinson Cancer Research Center. He obtained his PhD from the Johns Hopkins University in 2015. His research interests include rank- and graph-based methods, statistical optimal transport, mixture models, nonparametric and semiparametric regressions, time series analysis, and random matrix theory. He is one of the three FANG HAN UNIVERSITY OF WASHINGTON

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