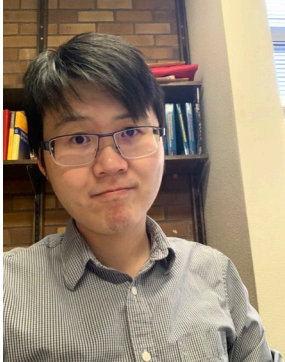


**Fang Han**  
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University of Washington



*Chatterjee's rank correlation: what is new?*

Wednesday, January 31st, 2024

11:50 AM

96 Frelinghuysen Road, CoRE Building, Room 431

**Zoom Meeting: Meeting ID: 969 0606 4706**

**Password: 745339**

<https://rutgers.zoom.us/j/96906064706?pwd=ZklvbExpRVBJQ3c5dUhhYTFuR2ZrZz09>

**Light refreshments will be served in Hill 452, 11:15am**

**Abstract:** In this talk, the speaker will provide a concise 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.

**Bio:** Dr. Fang Han is an associate professor of statistics, of economics (adjunct) at the University of Washington, and an affiliated investigator at Fred Hutchinson Cancer Research Center. He obtained his Ph.D. from the Department of Biostatistics, 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.

