



2025 SIMIS-CDEF Seminar Series: No. 4

Time: October 27th, 2025 (Monday), 2.00-4.00 pm (Beijing Time)

Venue: R910, Level 9, Block A, International Innovation Plaza, No. 657 Songhu Road, Yangpu District, Shanghai

Organizer: SIMIS Center for Digital Economy and Finance, SIMIS-CDEF

Chair: Qingfu Liu (刘庆富), Fudan University & SIMIS

Talk Two:

Quantile Treatment Effects under Local Interference



Authors: Zequn Jin, Gaoqian Xu, Zixin Yang

Speaker: Zequn Jin (金泽群), Shanghai University of Finance and Economics

Abstract: We study quantile treatment effects (QTE) under network interference. For units sharing the same degree, our estimands compare outcome quantiles across exposure configurations that differ in own treatment and the number of treated neighbors. Under a local-interference condition and mild restrictions on the degree distribution, these QTEs are point identified. We propose two estimators: (i) a degree-stratified nonparametric CQTE estimator, and (ii) a linear quantile-regression estimator. We establish consistency and weak convergence for both procedures and develop dependence-robust inference based on weighted and multiplier bootstrap. Monte Carlo experiments document small finite-sample bias and near-nominal coverage across a range of network designs. In an application to a randomized input-subsidy program in Mozambique, we uncover substantial distributional heterogeneity in both direct and spillover effects.

Speaker Bio: 金泽群, 上海财经大学经济学院副教授, 研究领域主要包括微观计量经济学、高维模型估计和因果推断。已在《Journal of Business & Economic Statistics》、《Econometric Theory》、《管理科学学报》等国内外权威期刊发表多篇论文, 主持国家自然科学基金面上项目、青年项目, 荣获 2021 上海市超级博士后资助。

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