LUTHER YAP
https://lutheryap.github.io/ | lyap@princeton.edu

EDUCATION

Princeton University, September 2019 – May 2025
Ph.D. in Economics

- Thesis Title: "Robust Inference in Econometric Models"
- Advisors: Michal Kolesár & David Lee | Committee Member: Ulrich Müller

M.A. in Economics, May 2021

University of Cambridge, June 2019
B.A. in Economics, First Class Honors

RESEARCH INTERESTS

- Econometrics, Weak Instruments, Clustering, Sensitivity Analysis

JOB MARKET PAPER

"Inference with Many Weak Instruments and Heterogeneity"
Abstract: This paper considers inference in a linear instrumental variable regression model with many potentially weak instruments and heterogeneous treatment effects. I first show that existing test procedures, including those that are robust to only either weak instruments or heterogeneous treatment effects, can be arbitrarily oversized in this setup. Then, I propose a valid inference procedure based on a score statistic and a leave-three-out variance estimator. To establish this procedure's validity, this paper proves that the score statistic is asymptotically normal and the variance estimator is consistent. With heterogeneity, the score test is the uniformly most powerful unbiased test in the asymptotic distribution.

WORKING PAPERS

"**Sensitivity Analysis of Policy Relevant Treatment Effects to Failure of Monotonicity**". Revise and Resubmit at *Journal of Applied Econometrics*.

"**What to do when you can't use '1.96' Confidence Intervals for IV**" (with David Lee, Justin McCrary, Marcelo Moreira, and Jack Porter)

"**Robust Conditional Wald Inference for Over-Identified IV**" (with David Lee, Justin McCrary, Marcelo Moreira, and Jack Porter)

"**Valid Wald Inference with Many Weak Instruments**"

"**Sensitivity Analysis for Linear Estimators**" (with Jacob Dorn)

"**Asymptotic Theory for Two-Way Clustering**"

"**Two-Stage Differences in Differences**" (with John Gardner, Neil Thakral, and Linh Tô)

"**The Dynamic Allocation of Public Housing: Policy and Spillovers**" (with Andrew Ferdowsian and Kwok-Hao Lee)

"**Build to Order: Endogenous Supply in Centralized Mechanisms**" (with Andrew Ferdowsian and Kwok-Hao Lee)

RESEARCH EXPERIENCE

- Research Assistant, Michal Kolesár, 2020 – 2021
- Research Assistant, Jessica Pan, 2018 – 2019

TEACHING EXPERIENCE

Preceptor of Graduate Econometrics, Princeton University, 2022 – 2023

- Course taught by Ulrich Müller, Mark Watson, and Mikkel Plagborg-Møller

Preceptor of Undergraduate Econometrics, Princeton University, 2021

- Course taught by Michal Kolesár

PROFESSIONAL ACTIVITIES

- Presenter at AEA/ ASSA; Econometrics Junior Conference (Notre Dame), 2024
- Presenter at Econometric Society European Meeting; NTU (Singapore), 2023
- Presenter at PhD Workshop (Queen Mary University of London); CIREQ PhD Students Annual Conference (Concordia); Young Economists Symposium (Yale), 2022

HONORS & AWARDS

- Clarence J. Hicks Memorial Fellowship, 2024
- Harold W. Dodds Honorific Fellowship, 2023
- Marimar and Cristina Torres Prize for Best Third Year Paper, 2022
- E.M. Burnett Prize for First Class in Economics Tripos, 2017-2019