



Department of Data Science

香港城市大學
City University of Hong Kong

DS SEMINAR

The Impacts of US-China Trade Relations and COVID-19 on the World Trade Networks

Date: 4 December 2024 (Wednesday)

Time: 2:00pm - 3:00pm

Venue: Rm Y5305, Yeung Kin Min Academic Building,
City University of Hong Kong

ABSTRACT

The US-China Trade relations and COVID-19 have greatly reshaped the world trade networks, leading to unforeseen consequences for the world economy. This talk introduces two research projects to explore these shifts using data-driven approaches, including complex network analysis, multi-scale temporal event models with a difference-in-differences approach. The first research employed complex network analysis to assess the spatio-temporal heterogeneity of international trade network vulnerabilities during the COVID-19. We found that Asia-Pacific areas show the strongest resilience to ensure the world supply chain due to an effective COVID-19 containment, followed by high-income countries with fast vaccine roll-out (e.g., U.S.), whereas low-income countries (e.g., Africa) show high vulnerability. The second research examined the effects of the US-China trade relations and COVID-19 on U.S. imports separately and collectively, with various economic scopes. With multi-scale temporal event models in the context of a difference-in-differences approach, our findings uncover intricate trading dynamics among the U.S., China, and Southeast Asia, through which Southeast Asian exporters have integrated more into value chains centered on Chinese suppliers and the U.S. effectively imported more goods indirectly through Southeast Asian exporters that imported from China.



Prof. Wei LUO

GUEST SPEAKER'S PROFILE

LUO Wei is an Assistant Professor in Geography Department and Joint Assistant Professor in Saw Swee Hock School of Public Health at National University of Singapore. Before he joined in NUS, he was a Research Associate at Boston Children's Hospital and Harvard Medical School. He received Master degree from Geography department at University at Buffalo and PhD degree at Penn State University. He leads GeoSpatialX Lab at NUS to conduct interdisciplinary research to address some of the most critical challenges facing the world, including spatial epidemiology, international trade and supply chain, energy crisis, food security, climate change, and so on. He has won Geospatial World 50 Rising Stars and Waldo-Tobler Young Researcher Award from Austrian Academy of Sciences' Commission of GIScience. He has more than 50 publications with 3600+ citations including some top profile journals such as Nature, Nature Reviews Earth & Environment, and Physics Reports. His work has received attention from media outlets such as CCTV.

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All are welcome