

Register here:



Welcome to join!

Urban Electrification and Spatial Externalities: Evidence from Charging Infrastructure

**1 April 2026 (Wed)
10:00–11:30**

**WYL314, 3/F, Dorothy Y. L. Wong
Building, Lingnan University**



Prof. XING Jianwei

*Associate Professor of Economics
National School of Development
Peking University*

BIOGRAPHY

Jianwei (Jerry) XING is an associate professor of Economics at the National School of Development, Peking University. He received his Ph.D. in Applied Economics from Cornell University. His research interests lie in environmental economics and empirical industrial organization, with a particular focus on electric vehicles, industrial policy, the economic impacts of environmental improvement, and the digital economy. His work has been published or accepted in the *Journal of Environmental Economics and Management*, *Journal of the Association of Environmental and Resource Economists*, *Journal of Public Economics*, and *American Economic Journal: Macroeconomics*, *Economic Journal*, and *Review of Economics and Statistics*. He currently serves as a Co-Editor of the *Journal of the Association of Environmental and Resource Economists*.

ABSTRACT

The rapid adoption of electric vehicles (EVs) is transforming urban transportation systems. Despite the central role of charging availability in shaping EV usage, little is known about how micro-level charging access affects driving behavior, parking demand, and urban externalities. Using detailed data from Beijing, including parking transactions, charging infrastructure records, vehicle trajectories, and congestion measures, we examine how charging deployment influences parking demand, consumer mobility, and environmental outcomes. We find that installing chargers within parking lots significantly increases EV parking demand, with no detectable effect on gasoline vehicles. Charging infrastructure attracts new EV users and expands drivers' activity space, increasing both travel distance and mobility dispersion. At the urban level, deployment generates heterogeneous externalities: congestion rises modestly near major roads due to localized inflows, while air pollution declines as EV usage increases. These findings provide new micro-level evidence on how electrification reshapes urban spatial equilibrium and highlight key trade-offs in charging infrastructure planning.