



## Working Group on Statistical Learning Seminar

**Title:** Citizens' demand for local representation: Measurement and causal inference using constituency-level candidate votes

**Speaker:** Thomas Däubler (UCD)

**Date:** Thu 26th March 2026 at 3:00PM

**Location:** E0.32 (beside Pi restaurant)

**Abstract:** It is a widespread pattern in political elections that candidates receive more votes near where they live, but it is less well understood why this is the case. The presentation introduces one work package of a newly funded research project that examines to which extent electoral home advantages reflect a genuine demand for representation by politicians who live nearby. A key question we ask is whether geographically concentrated economic disparities have a causal impact on voting for local candidates. The data will eventually come from 14 elections (1966–2023) to the state-level parliament of Bavaria, Germany. These elections use a peculiar mixed-member electoral system, where 90–100 single-seat constituencies (SSCs) are nested within seven regional districts. In each election, we observe each candidate's open-list vote in multiple SSCs (currently 8  $\leq$  N  $\leq$  31) in their region. The variation in a candidate's 'localness' across the SSCs can be used to separate the demand for local representatives from general (region-wide constant) candidate appeal. We can then leverage variation over time to study the causal effects of SSC-level economic variables on this demand, from a Neyman–Rubin potential outcomes perspective. From a statistical point of view, the task consists of combining the analysis of aggregate-level multinomial counts with techniques for causal inference from observational data. An additional complication arises if we allow for heterogeneity in the underlying

utility function of voters. It may also be more appropriate to measure the key variables (candidate-voter geographical distance and relative economic status) below the level of SSCs. However, for most of the elections only the party totals but not the candidate votes are available at the municipality level. We are eager to receive some feedback on tackling these issues and would also be interested in starting interdisciplinary collaborations as part of this larger project.

Joint work with Lukas Rudolph, University of Konstanz.