ESS22-032 - Multiscale network modelling of migration flows in Austria

Abstract

The aim of this project is to use a unique combination of datasets on individual-level migration events in Austria with high-resolution socio-economic maps to reveal the nationwide, multi-scale, hierarchical internal flow of people over a period of more than two decades, together with its latent social and economic correlates. Using state-of-the-art data science methodology, we will combine longitudinal neighborhood-level relocation information with individualized data on income, employment, and demographic factors (e.g. ethnicity, gender, nationality, marital status). Using customized inferential network science methods, we will construct a higher-order dynamic generative model able to identify the most relevant spatial and temporal patterns and dynamics of internal migration, as well as their underlying causal structures. We aim to answer the following questions: 1. How do social segregation and social mobility interact with internal and international migration, and 2. How does migration interact with urban and economic development? By answering these questions, our data-driven analysis will allow us to assess the impact of policy interventions on the dynamics of social mobility, segregation, urbanisation, immigration and socio-economic development.
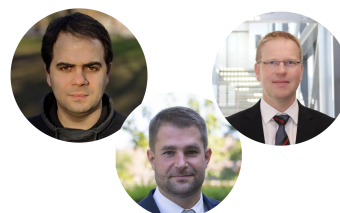
Scientific disciplines:

Empirical social research (40%) | Data science (40%) | Migration research (20%)

Keywords:

computational social science; network science; network analysis; migrationdata science

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Further links to the persons involved and to the project can be found under
https://www.wwtf.at/funding/programmes/ess/ESS22-032/