

Spatial growth: models and estimation

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Course Description

The investigation of the causes of the spatial distribution of regional economic activity is a very debated issue in the literature. Several economic geography models have been introduced to explain the emergence of spatial patterns.

The course's objective is to introduce the students to the classical approaches followed in the literature as well as the more novel ones. A particular focus will be devoted to the empirical estimation and to new frontiers in spatial econometrics.

Course Outline

1. An introduction to economic growth over space: the presence of spatial dependence and spatial spillovers (class I)
2. An introduction to spatial statistics and econometrics (class II)
3. Empirical applications (class III):
 - the impact of EU funding on regional convergence
 - the time-space evolution of Italian municipal income and population
 - the use of nightlights to proxy for economic activity

References

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- Fiaschi, Davide, and Cristiano Ricci. The spatial dynamics of population: an agent-based approach, mimeo, 2023.
- Fiaschi, Davide, Angela Parenti, and Cristiano Ricci. Spatial Aggregation-Repulsion-Diffusion model: theory and estimation, mimeo, 2023.
- Fiaschi, Davide, Angela Parenti, and Cristiano Ricci. Nightlights as measure of local development: the case of Italy, mimeo, 2023.