# Spatial Economics

Matthias Wrede

FAU

### Syllabus

- Prerequisites: Microeconomics, Econometrics I
- Language: English
- Availability: annually (summer semester)
- Creditable for MSc Economics (Public Economics & Labor Economics) and MSc Sozialökonomik
- ullet Workload 150 h (including 60 contact hours)  $\equiv$  5 ECTS
- Lecture (2 h per week) + tutorial (2 h per week)
- 60-minutes written examination (80%) + presentation (20%)
- Exam covers lecture + tutorial
- Slides, papers, exercises, data etc. on StudON (password protected)
- Lecture: Matthias Wrede (matthias.wrede@fau.de),
  Wednesday, 09:45-11:15; LG 5.154; starts April 23
- Exercises: Ramona Müller (ramona.v.mueller@fau.de),
  Wednesday, 16:45-18:15; starts April 30

### Learning objectives and skills

#### Students

- describe and to internationally compare the regional patterns of major economic activities in terms of stylized facts,
- present, interpret, and discuss selected theories in regional and urban economics.
- assess empirical tests of selected hypotheses derived from theories in regional and urban economics to evaluate and critically examine their informative value,
- discuss and critically examine economic policy implications of selected theories in regional and urban economics,
- assess, evaluate and discuss selected recent research papers.

#### Content

- Part I: Foundations
- Part II: Spatial equilibrium models
- Part III: Economic geography
- Part IV: Regression analysis
- Part V: Compensating differentials
- Part VI: Quantitative spatial modeling
- Part VII: Selected studies

### **Textbooks**

- Brakman, S., Garretsen, H. & van Marrewijk, C. (2019). An Introduction to Geographical and Urban Economics: A Spiky World. Third Edition. Cambridge, UK: Cambridge University Press.
- Brueckner, J.K. (2011). Lectures on Urban Economics. Cambridge: MIT Press.
- Combes, P.-P., Mayer, T. & Thisse, J.-F. (2008). Economic Geography. Princeton and Oxford: Princeton University Press.
- Elhorst, J.P. (2014b). Spatial Econometrics. Berlin, Heidelberg: Springer-Verlag.
- Fujita, M. & Thisse, J.-F. (2002). Economics of Agglomeration. Cities, Industrial Location, and Regional Growth. Cambridge, UK: Cambridge University Press.

### Selected surveys

- Baum-Snow, N. & Ferreira, F. (2015). Causal Inference in Urban and Regional Economics. In: Duranton, G. Henderson, J.V. & Strange, W.C. (Ed.) Handbook of Regional & Urban Economics. Vol. 5A. 3-68.
- Elhorst, J.P. (2014a). Spatial Panel Methods. In: Fischer, M.M. & Nijkamp P. (Ed.) Handbook of Regional Science. Berlin, Heidelberg: Springer-Verlag. 1637-1652
- Moretti, E. (2011). Local Labor Markets. In: D. Card & O. Ashenfelter (Ed.). Handbook of Labor Economics. Vol. 4b. 1237-1313.
- Neumark, D. & Simpson, H. (2015). Place-Based Policies. In: Duranton, G. Henderson, J.V. & Strange, W.C. (Ed.) Handbook of Regional & Urban Economics. Vol. 5B. 1198-1287.
- Redding, St.J. & Rossi-Hansberg, E. (2017). Quantitative Spatial Economics. Annual Reviews of Economics 9. 21-58.

### Academic field journals

- Spatial economics:
  - Journal of Urban Economics
  - Journal of Economic Geography
  - Regional Science and Urban Economics
  - Journal of Regional Science
  - ► Land Economics
  - Urban Studies
  - Annals of Regional Science
  - Papers in Regional Science
  - Review of Regional Research
- Related fields:
  - Journal of Public Economics
  - Transportation Research Part B: Methodological
  - Journal of Housing Economics

## Online Spatial and Urban Seminar

https://osus.info

## Mandatory presentations

- Several empirical tasks
- Each task will be assigned to a group of three to five students on May 15th.
- Ideally, teams should be formed beforehand.
- Each groups will be given a data set and is asked to apply a certain concept (e.g., fixed & random effects models, spatial regression models, different functional forms of distance variables)
- The group solves the task together and prepares a 20-minutes presentation.
- In the presentations, groups should describe and discuss tasks, methods, results, and implications.
- Presentations at July 9th
- Participation compulsory
- More information: Ramona Müller (ramona.v.mueller@fau.de)