Master Program in Economics

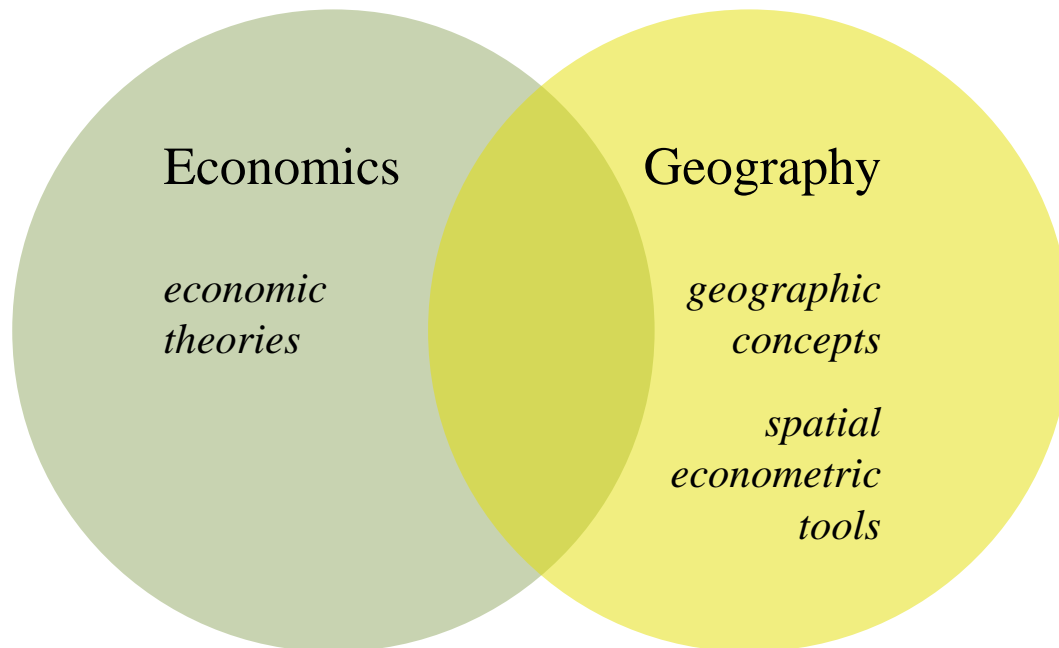## Course on Spatial Economics

Instructors

Philipp Piribauer,

Franziska Disslbacher,

Mathias Moser

Spatial economics

Economics

economic theories

Geography

geographic concepts

spatial econometric tools

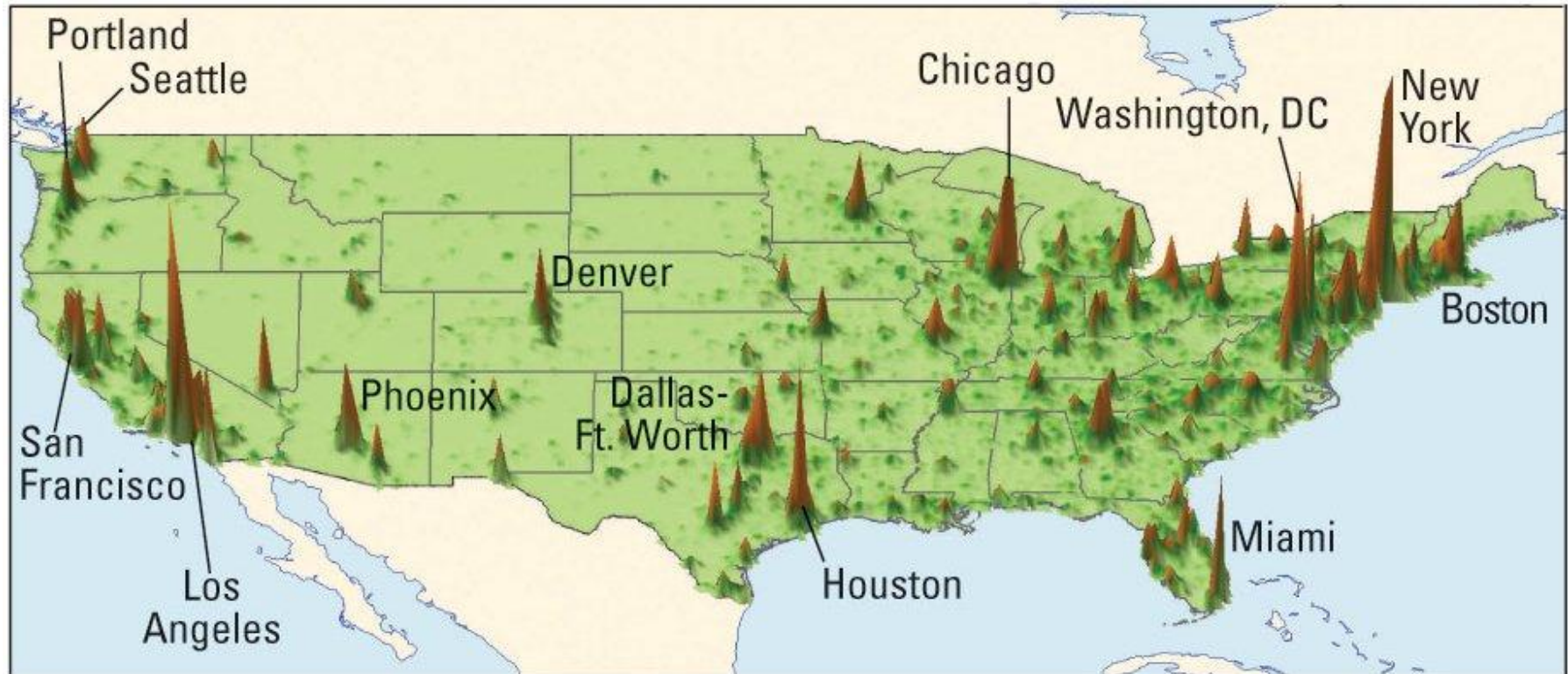a field that evolved at the interface between economics and geography

that applies **economic theories** and **geographic concepts**, and uses **spatial econometric** tools

to understand **spatial differences** in **economic processes** such as

economic growth and development

at different levels of geographic resolution

EFMD
EQUIS
ACCREDITED

Notes: the height on this map indicates economic output produced at that location; measured in terms of *grp* per square km of land

- *economic output is not randomly distributed*

- *neighbourhood matters*

Overview

Objectives	The main objective of the course is to expose you to the state of art in spatial economics with emphasis on spatial econometric methods and regional economic growth
Structure of the course	Phase 1: Lectures (Friday units) Lab tutorials with small homeworks (Thursday units) Phase 2: Class projects in team work Final exam
Prerequisites	No formal prerequisites, but a good knowledge in econometric methods is recommended.

Course outline

Fri, March 16 16:00-19:00	Welcome and organization, introduction and motivation *Lecture* Basic mathematical and statistical tools
Thu, March 22 14:00-17:00	*Tutorial* Introduction R/Applied data analysis
Fri, March 23 16:00-19:00	*Lecture* Introduction to spatial data analysis Empirics of regional economic growth and convergence
Thu, April 12 14:00-17:00	*Tutorial* Discussion Homework I Applied spatial data analysis

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Course outline (*ctd*)

Fri, April 13 16:00-19:00	**Lecture** Spatial econometric methods and techniques I
Thu, April 19 14:00-17:00	**Tutorial** Discussion Homework II Spatial econometric toolbox I
Fri, April 20 16:00-19:00	**Lecture** Spatial econometric methods and techniques II
Thu, April 26 14:00-17:00	**Tutorial** Discussion Homework III Spatial econometric toolbox II

Course outline (*ctd*)

Fri, April 27 16:00-19:00	**Lecture** Bayesian spatial econometric methods I
Thu, May 17 14:00-17:00	**Tutorial** Discussion Homework IV Spatial econometric toolbox III **Class project** **Every participant is encouraged to carry out a small class project, either alone or as a small group. You may use your own data or one of the sample data sets provided.**
Fri, May 18 16:00-19:00	**Lecture** Bayesian spatial econometric methods II

Course outline (*ctd*)

Thu, May 24 14:00-17:00	**Final exam**
Thu, June 7 14:00-17:00	***Class project*:** Progress report
Thu, June 14 14:00-17:00	***Class project*:** Progress report
Thu, June 21 14:00-17:00	***Putting it all together*:** Project presentation of the final results You should be ready to summarize your findings and defend and interpret the final model specification in both methodological and substantive terms.
Thu, June 28 14:00-17:00	***Putting it all together*:** Project presentation of the final results You should be ready to summarize your findings and defend and interpret the final model specification in both methodological and substantive terms.

Grading

Mode of assessment

Active participation and exercises (20%); class project (30%) and final exam (50%)

Grades

87.5-100% (very good: 1), 75.0-87.5% (good: 2), 62.5-75.0% (satisfactory: 3), 50-62.5% (sufficient: 4), 0-50% (fail: 5)