Potential attendants:

- Preferably, students should have completed—or be doing—graduate/postgraduate studies and/or research in topics related with SPATIAL ANALYSIS: Regional Science, Urban Economics, Local Planning, International Economics, Geopolitics, Transport, Networks, Geomarketing, Epidemiology, Geology, etc.

- Experts working in regional/urban research and local planning in Governmental Agencies and Research Institutes are welcome.

- Exceptionally, undergraduate students: > 200 ECTS credits.

REGISTRATION FEES:

<table>
<thead>
<tr>
<th>Category</th>
<th>Before February 4, 2019</th>
<th>After February 4, 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ordinary fees</td>
<td>250 €</td>
<td>400 €</td>
</tr>
<tr>
<td>UAM students</td>
<td>150 €</td>
<td>250 €</td>
</tr>
<tr>
<td>UAM former students (‘Alumni’)</td>
<td>200 €</td>
<td>320 €</td>
</tr>
</tbody>
</table>

A STATA 15 free temporary license will be provided if needed.

For PREREGISTRATION, send an email to econres@uam.es

SPATIAL ECONOMETRIC ANALYSIS WITH STATA AND R

Place: FACULTY OF ECONOMICS AND BUSINESS ADMINISTRATION, UNIVERSIDAD AUTÓNOMA DE MADRID

Duration: From February 11 to 15, 2019 (26 hours, 2.5 ECTS)

Faculty:

- Prof. Coro Chasco (UAM, Spain)
- Prof. Ludo Peeters (Hasselt University, Belgium)
- Prof. Andrés Vallone (UCN, Chile)

Maximum: 25 students
The GOAL of the Seminar is to provide the participants with a sound understanding of basic and more advanced principles of spatial econometrics and to offer tools for practical application of the methodology. Commonly available software products (STATA and RStudio) will be introduced and practiced in the PC training sessions.

Program:

I PART: How to use R for spatial analysis (10 hours).

1st Session: Monday 11th of February, 15:30 – 19:30 (4 hours)
   I.1. Introduction to R.
   I.2. Treating data with R.
   I.3. Using R

2nd Session: Tuesday 12th of February, 10:00 – 13:00 (3 hours)
   II.1. Think as a computer
   II.2. Conditionals
   II.3. Loops: how to build own functions

3rd Session: Tuesday 12th of February, 14:30 – 17:30 (3 hours)
   III.1. Use of pre-programming functions
   III.2. Basic statistics in R
   III.3. Packages: installation and usage

II PART: Spatial Autoregressive Models with R (9 hours).

4th Session: Wednesday 13th of February, 10:00 – 13:00 (3 hours)
   IV.1. Exploratory spatial data analysis (ESDA).

5th Session: Wednesday 13th of February, 14:30 – 17:30 (3 hours)
   V.1. Specification strategies in spatial cross-sectional regression models.
   V.2. Example of specification and estimation strategies in cross-sectional regression models in R.

6th Session: Thursday 14th of February, 10:00 – 13:00 (3 hours)
   VI.1. Spatial panel data models in R.

III PART: Exploratory spatial data analysis and spatial econometrics using STATA (7 hours).

7th Session: Thursday 14th of February, 14:30 – 18:30 (4 hours)
   VII.1. Old STATA commands prior to STATA 15.
   VII.2. New STATA commands in STATA 15.

8th Session: Friday 15th February, 10:00 – 13:00 (3 hours)
   VIII.1. EXTENDED ‘REAL WORLD’ APPLICATION.