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# ANALYSIS OF SPATIAL DATA IN EPIDEMIOLOGY

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Research Group on Statistics, Econometrics and Health (GRECS), University of Girona  
CIBER of Epidemiology and Public Health (CIBERESP)

# COURSE INTRODUCTION

1. **Course introduction**
2. Introduction to epidemiology and spatial statistics
3. Overview of mixed models
4. Overview of mixed models - Practicals
5. Introduction to INLA and R INLA
6. R INLA - Practicals

Wednesday 8

Friday 10

## COURSE INTRODUCTION

- 7. Disease mapping. Standardisation of incidence and mortality rates
- 8. Disease mapping. Smoothing standardised incidence and mortality rates
- 9. Disease mapping – Practicals
- 10. Geographical association studies. Spatial ecological regression
- 11. Spatial ecological regression - Practicals

Tuesday 14

# COURSE INTRODUCTION

- 12. Clustering
- 13. Extensions: BYM2, point processes, leaflet, pc priors
- 14. Extensions – Practicals

} Thursday 16

## THE CONFERENCE MORNING SESSION



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