

# Topics in nonparametric smoothing

## Lecturer

Maarten JANSEN (Coordinator)

## Course mnemonic

STAT-F418

## ECTS credits

5 credits

## Language(s) of instruction

English

## Course period

First term

## Campus

Plaine

## Course content

Study of at least one of the following topics: (1) spline smoothing (2) kernel or multiscale local polynomial estimation (3) wavelet or multiscale smoothing.

## Objectives (and/or specific learning outcomes)

The course is about nonparametric regression or density estimation (nonparametric should not be understood as distribution free here, but rather refers to a nonspecified or observation dependent model for the covariate-response relationship)

## Teaching method and learning activities

Literature study with focus on one or several aspects (theoretic, computational, application) and one or several smoothing techniques

Reproduction of research results (proofs and/or simulation studies)

## Contribution to the teaching profile

Nonparametric statistics

## Other information

### Place(s) of teaching

Plaine

### Contact(s)

Maarten Jansen, see <https://maarten.jansen.web.ulb.be/index.html> for contact information

## Evaluation method(s)

Other

### Evaluation method(s) (additional information)

Written report and regular meetings/intermediate discussions of progress

### Main language(s) of evaluation

English

## Programmes

### Programmes proposing this course at the faculty of Sciences

MA-STAT | **Master in Statistics : General** | finalité Research General/unit 1

### Programmes proposing this course at the Solvay Brussels School of Economics and Management

MA-ECOE | **Master in Economics : Econometrics** | finalité Research in Economics and statistics/unit 2