

# Nonparametric Smoothing Techniques

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## Course Description

This course presents to the students an overview of recent nonparametric techniques in statistical analysis. The discussed techniques form the basis of modern nonparametric or so-called smoothing procedures.

## Objectives

The idea of this course is to get the students acquainted with the fundamentals, basic properties and use of the most important recent nonparametric techniques. One of these techniques will be explored in more detail. A second aim is to get students acquainted to research questions in this domain.

## Program

7	May	9.00-11.00	Density estimation
10	May	9.00-11.00	Introduction of various smoothers
10	May	11.00-13.00	Computer lab
14	May	9.00-11.00	Kernel regression
17	May	9.00-11.00	Splines
17	May	11.00-13.00	Computer lab
21	May	9.00-11.00	Parameter smoothing choice
24	May	9.00-11.00	Multivariate extensions
24	May	11.00-13.00	Computer lab

## Recommended text

- Wasserman L. (2007) All of Nonparametric Statistics, Springer

## Final Exam

4 June, 9.00 am