

Bocconi University
PhD in Statistics & Computer Science

40144 STATISTICAL THEORY II
Instructors: Zoraida Rico and Botond Szabo

Lecture 1-3: Nonparametric estimators (standard nonparametric models and their relations, kernel estimators, sequence estimators, adaptation)

Lectures 4-5: Minimax rates and lower bounds for nonparametric models

Lecture 6: Posterior consistency (Doob's and Schwarz's theorems)

Lecture 7: Posterior contraction rates (general theorem, application for Dirichlet process mixtures)

Lecture 8-9: Gaussian processes (introduction, general contraction rate theorem, applications for various models and GPs)

Lecture 10: overview of the course and a selection of state-of the art statistical problems and methods