Adaptive estimation via selection from given family of estimators

Prof. Oleg Lepski

Université de Provence, Marseille

The aim of the talk is to present some general introduction to the theory of adaptive estimation, from sufficiently known results to the modern state of art.

- (i) Introduction to adaptive estimation
 - Statistical models and linear estimators
 - Minimax and minimax adaptive approach
- (ii) Selection from a given family of linear estimators
 - Oracle approach
- (iii) Sup-norm oracle inequality in density estimation
 - Selection from the family of kernel estimators
 - Adaptation over anisotropic Hölder classes.