UNIVERSITY OF SYDNEY

SCHOOL OF MATHEMATICS AND STATISTICS

Statistics Seminar

Friday, 18 August, 2.00pm

Eastern Avenue Lecture Theater

Convergence rates for unconstrained bandwidth matrix selectors in multivariate kernel density estimation.

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Abstract

Progress in selection of smoothing parameters for kernel density estimation has been much slower in the multivariate than univariate setting. Within the context of multivariate density estimation attention has focused on diagonal bandwidth matrices. However there is evidence to suggest that the use of full (or unconstrained) bandwidth matrices can be beneficial. In this talk we present some results in the asymptotic analysis of the two main classes (cross-validation and plug-in) of data-driven selectors of full bandwidth matrices.

Enquiries about the Statistics Seminar should be directed to Marc Raimondo (marcr@maths.usyd.edu.au)