STANFORD UNIVERSITY

DEPARTMENT OF STATISTICS

DEPARTMENTAL SEMINAR

4:15 p.m., Tuesday, Feb 22 2005
Sequoia Hall Room 200
(Cookies at 3:45 in 1st Floor Lounge)

Moulinath Banerjee
Department of Statistics
University of Michigan

Inference for Conditionally Parametric Response Models

Abstract:

Conditionally parametric response models provide flexible (and consequently useful) strategies for nonparametric modelling. Formally, consider a sequence of i.i.d. observations from the distribution of (X;Z) where X is a response variable and Z a covariate with some unknown distribution and the conditional distribution of X given Z = z is p(:; (z)), where p(:;) is a oneparameter regular parametric family of densities. We are interested in making inference on the unknown dependence function . I will talk about the utility of such models in applications and present inference problems regarding . Key themes will be (a) inference for under shape restrictions, (b) threshold estimation for . I will present several unified theorems and time permitting, talk about extensions of these ideas to more complex (semiparametric) models.