



STATISTICS DEPARTMENT

SEMINAR

TITLE: ESTIMATION OF LINK FUNCTIONS IN
MONOTONE RESPONSE MODELS

SPEAKER: Jayanta Pal
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TIME: 4:00 P.M.

DATE: Friday, January 27, 2006 (Note different day)

ROOM: 140 BARDEEN

ABSTRACT:

Conditionally parametric models of the covariate-response type are considered. The estimation of the unknown link function can be done using non-parametric methods. The shape-restriction and smoothness assumptions are taken into account for scientific purposes. Applications include isotonic regression, current status models, hazard-vulnerability rates etc. We discuss the likelihood-ratio method briefly and the smoothing spline method. Using a penalized least square method to incorporate both smoothness and monotonicity, we develop a scheme to produce functional estimates of the unknown link function. Pointwise confidence sets can be produced for the regression curve.

Coffee and Cookies at 3:30 p.m. in Room 1210 MSC