Methods for Longitudinal Data with Missing Observations and Mismeasured Measurements

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Abstract: In this talk I will discuss regression methods to estimate parameters of interest in settings of longitudinal data with missing observations as well as mismeasured measurements. The response process is characterized by means of generalized linear models where only the mean and variance structures are specified. Measurement error is modeled nonparametrically in the sense that only the moments structures are assumed for the observed measurements. Consistent estimators of mean response parameters can be derived from unbiased estimating equations, provided the missing data process is correctly accommodated. The performance of the proposed methods is assessed through numerical studies.