Einladung zum Biometrischen Kolloquium

Am 21.2.2017, 11-12h

MUW-CeMSIIS, Spitalgasse 23, 1090 Wien, BT 88, Informatik-Bibliothek 88.03.806

Host: Georg Heinze

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REDUCED-BIAS INFERENCE FOR REGRESSION MODELS WITH TRACTABLE AND INTRACTABLE LIKELIHOODS

This talk focuses on a unified theoretical and algorithmic framework for reducing bias in the estimation of statistical models from a practitioner's point of view. The talk will briefly discuss how shortcomings of classical estimators can be overcome via reduction of bias, and provide a few illustrations for well-used statistical models with tractable likelihoods, including regression models with categorical responses and Beta regression. New results will then be presented on the use of bias reduction methods for linear mixed effects models by focusing on the typically small-sample setting of meta-regression in the presence of heterogeneity. The large effect that the bias of the variance components can have on inference motivates the application of the framework to deliver higher-order corrective methods for generalised linear mixed models. The challenges in doing that will be presented along with resolutions stemming from current research.