

Kolloquium „Statistische Methoden in der empirischen Forschung“

Wann: 05. Februar 2019, 17:00 – 18:30 Uhr

Wo: Robert Koch-Institut | Nordufer 20 | 13353 Berlin (Wedding),
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Resampling techniques for general models and very small sample sizes

Since the pioneering work “Bootstrap Methods: Another Look at the Jackknife” by Efron (Annals of Statistics, 1979), bootstrap and resampling methods have become a generally accepted tool in statistical sciences. Most importantly, one often reads “the null distribution of a statistic is computed using permutation methods”. The arising questions are “When do resampling and permutation methods work” and especially “How do resampling methods work?”. In this talk, we will study different resampling methods and find answers to the questions above. It will turn out, that so-called studentized permutation methods are even valid when data is not exchangeable. Real data sets illustrate the application of the proposed methods using mean based and purely nonparametric rank-based methods.