

Einladung zu einem Vortrag in der

AG STOCHASTIK

am Dienstag, 16.06.2026, um 15.45 Uhr.

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spricht über das Thema

Eigenbootstrap and Tensor Changepoint Detection

Tensor data consisting of multivariate outcomes over the items and across the subjects with longitudinal and cross-sectional dependence are considered. A completely distribution-free and tweaking-parameter-free detection procedure for changepoints at different locations is designed, which does not require training data. A CUSUM type test statistic is employed, and its asymptotic properties are derived for a large number of available individual profiles. The considered test is shown to be consistent. We propose an eigenbootstrap superstructure that overcomes the computational curse of dimensionality without any loss of information, while it preserves all the dependencies within and between the panels. The validity of this new and fast resampling algorithm is proved in this general setting. The empirical properties of the detection technique are investigated through a simulation study. The fully data-driven test is applied to real-world data from EEG and psychometrics.

Ort: SR 2.058 (Geb. 20.30)

Die Dozentinnen und Dozenten der Stochastik