High-Dimensional Statistical Learning for (Financial and Economic) Time Series: A Bayesian's View

Gregor Kastner

We address typical challenges that arise when dealing with multivariate and potentially high-dimensional time series data. By taking a Bayesian stance and carefully balancing model complexity with parameter sparsity, remedies to (some of) those challenges are proposed. A particular focus is placed on timevarying (co)variance estimation and prediction. In addition, we shed light on the computational issues that appear when implementing our proposals. Throughout the talk, the efficacy of the models and methods proposed is illustrated through applications in economics, finance, and beyond.