Contribution ID: **7** Type: **not specified**

Sparse + low rank models

Tuesday, 21 May 2019 15:30 (20 minutes)

In many applications one is interested in a decomposition of a given matrix into a sparse and a low-rank component. The talk takes a closer look on latent variable graphical models. For these the interaction parameter matrix of a multivariate joint probability distribution is decomposed, where the sparse component corresponds to direct interactions, and the low-rank component depicts spurious indirect interactions due to latent variables. In practice, the models can be learned using convex optimization. The talk concludes with an outlook on further applications of sparse + low-rank decompositions such as robust principal component analysis, multi-task learning and hyperspectral image denoising.

Presenters: NUSSBAUM, Frank; GIESEN, Joachim