

Bayesian inference for inverse problems of signal and image processing in acoustics

The content:

- Examples of inverse problems arising in acoustics
- Classical methods: Generalized inversion and Regularization
- Basics of Bayesian approach
- Full Bayesian for unsupervised methods
- Different prior models: Generalized Gaussian, Mixture models, Hierarchical models
- Bayesian computation
- Case studies: Deconvolution, Image restoration, Acoustic sources localization, Blind sources separation, Blind Deconvolution.
- Matlab based demonstrations