

**Smoothness priors, shrinkage and sparsity in system identification, Bayesian procedures from a classical perspective.**

Alessandro Chiuso

*Università di Padova*

In this talk I shall discuss some Bayesian techniques which have been recently developed to perform system identification of large scale, possibly distributed systems. Comparison with state-of-the art techniques for sparse estimation will be provided. In addition the statistical properties of these Bayesian estimators will be studied from a classical perspective in terms of Mean Squared Error (MSE).