Generalized Fiducial Inference for Sparse High Dimensional Systems with Application to Wavelet Regression

Thomas Lee
Department of Statistics, The Chinese University of Hong Kong, Hong Kong and Department of Statistics Colorado State University, U.S.A.

We study the problem of constructing confidence intervals for large dimensional sparse linear systems. In particular we focus our work on wavelet regression. Our method is based on a recent generalization of generalized fiducial inference studied by Hannig (2006). Simulation results suggest good frequentist properties of the proposed method. This is joint work with Jan Hannig.

[Thomas Lee, Department of Statistics, The Chinese University of Hong Kong, Hong Kong; tlee@sta.cuhk.edu.hk]