Korbinian Strimmer

Seminar Summer 2006

Literature List

A: Regularized Inference

1) Stein-type /empirical Bayes estimation

Efron, B. and Morris, C. 1975. Data analysis using Stein's estimator and its generalizations. JASA **70**:311-319.

2) Regularized classification

Friedman J.H. 1989. Regularized discriminant analysis. JASA **84**:165-175.

Tibshirani, R, et al. 2002. Diagnosis of multiple cancer types by shrunken centroids of gene expression. PNAS **99**:6567-6572.

3) Computational tricks

Hastie, T, and Tibshirani, R. 2004. Efficient quadratic regularization for expression arrays. Biostatistics **5**:329-340.

B: Multiple testing and model selection

4) Local fdr theory

Efron, B. 2004. Large-scale simultaneous hypothesis testing: the choice of a null-hypothesis. JASA **99**:96-104.

Efron, B. 2005. Local false discovery rates. Preprint (for Statistical Science)

5) Large-scale differential expression

I. Lönnstedt and T. Britton. 2005. Hierarchical Bayes models for cDNA microarray gene expression. Biostatistics **6**:279-291.

6) FDR and model selection

D. Gosh, W. Chen, T. Raguhathan. 2004. The false discovery rate: a variable selection procedure. Preprint.

C: Dynamic Models

7) Inference of high-dimensional VAR model

S. Ni and D. Sun. 2005. Bayesian estimates for vector autoregressive models. J. Business. Economic Statistics. 23:105-117

8) State-space models inferred by variational Bayes:

M. J. Beal, F. Falciani, Z. Gharamani, C. Rangel, and D. Wild. 2005. A Bayesian approach to reconstructing genetic regulatory networks with hidden factors. Bioinformatics **21**:349-356

9) Random walk resp. diffusion model:

D. Brockmann, L. Hufnagel, and T. Geisel. 2006. The scaling laws of human travel. Nature **439**:462-465 (plus four supplements)

D: Graphical Models

10) Graphical models and time series data:

F. R. Bach and M. I. Jordan. 2004. Learning graphical models for stationary time series. IEEE Transactions on Signal Processing **52**:2189-2199

11) Constructing large-scale graphical models:

B. Jones, C. Carvalho, A. Dobra, C. Hans, C. Carter, and M. West. 2005. Experiments in stochastic computation for high-dimensional graphical models. Statistical Science **20**:388-400

12) Spirtes PC algorithm:

M. Kalisch and P. Bühlmann. 2006. Estimating high-dimensional directed acyclic graphs with the PC-algorithm. Preprint