5th NIPE SUMMER SCHOOL: Bayesian Econometrics
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Universidade do Minho
June 30 – July 2, 2008

Many of the **readings** can be found in the following three books:

Lancaster: Tony Lancaster, *An Introduction to Modern Bayesian Econometrics,* Blackwell Publishing, 2004.

TSA: James D. Hamilton, *Time Series Analysis*, Princeton University Press, 1994.

SSM: Chang-Jin Kim and Charles R. Nelson, *State-Space Models with Regime Switching*, MIT Press, 1999.

Course outline

I. Bayesian econometrics

A. Introduction
  Lancaster, Chapter 1
  TSA, Section 12.1
  Morris H. DeGroot, *Optimal Statistical Decisions*, McGraw-Hill, 1970, Chapter 6, and Sections 9.1-9.6
  Bradley Efron and Carl Morris, "Data Analysis Using Stein's Estimator and Its Generalizations," *Journal of the American Statistical Association*, 1975, vol. 70, pp. 311-319

B. Bayesian inference in the univariate regression model
  SSM, Sections 7.1 and 7.2
  TSA, Section 12.2
  Lancaster, Chapter 3

C. Some general issues in Bayesian inference
  Lancaster, Chapter 2

D. Numerical Bayesian methods
  Lancaster, Chapter 4
  A.F.M. Smith and A.E. Gelfand, "Bayesian Statistics Without Tears: A Sampling-Resampling Perspective," *American Statistician*, 1992, vol. 46, pp. 84-88.
  SSM, Sections 7.3 and 7.4
  Siddhartha Chib and Edward Greenberg (1996), "Markov Chain Monte Carlo Simulation Methods in Econometrics," *Econometric Theory* 12, pp. 409-431.
  James D. Hamilton, Daniel F. Waggoner, and Tao Zha, "Normalization in Econometrics," working paper, University of California, San Diego, 2004.

II. Vector autoregressions

A. Introduction
TSA, Section 11.6, pp. 324-336

B. Normal-Wishart priors for VARs
K. Rao Kadiyala and S. Karlsson, "Numerical Methods for Estimation and Inference in Bayesian VAR-models," *Journal of Applied Econometrics*, 1997, vol. 12, pp. 99-132.
John Geweke, "Antithetic Acceleration of Monte Carlo Integration in Bayesian Inference," *Journal of Econometrics*, 1988, vol. 38, pp. 73-89.

C. Bayesian analysis of structural VARs
Christopher A. Sims and Tao Zha, "Bayesian Methods for Dynamic Multivariate Models," *International Economic Review*, 1998, vol. 39, pp. 949-968.

III. Markov-switching models

A. Introduction to Markov-switching models
Marcelle Chauvet and James D. Hamilton, "Dating Business Cycle Turning Points," forthcoming in *Nonlinear Analysis of Business Cycles*, edited by Dick van Dijk , Costas Milas, and Philip Rothman
TSA, Chapter 22

B. Bayesian analysis of Markov-switching models
SSM, Chapter 9
Filardo, Andrew J., and Stephen F. Gordon (1998), "Business Cycle Durations," *Journal of Econometrics*, 85, pp. 99-123