



*2010 CEA Econometrics Occasional Seminars*

Short course on:

**BAYESIAN STATISTICS/ECONOMETRICS**

Lecturer: Professor Pietro Muliere (Bocconi University, Italy)

Cass Business School, Centre for Econometrics Analysis  
25-29 January 2010.

**LECTURE 1.** Basic notions about Bayesian inference. Subjective probability. Construction of the statistical models. Sufficient statistics. Conjugate priors. Non-informative priors distributions.

(25 January 2010, 9:00-12:00, Room 6038)

**LECTURE 2.** Decision theoretic foundations of statistical inference. Utility and means. Estimation. Confidence intervals. Testing of hypotheses.

(26 January 2010, 9:00-12:00, Room 6038)

**LECTURE 3.** The predictive approach of inference. The exchangeability. The representation of de Finetti. Partial exchangeability and Markov exchangeability. Priors and models.

(27 January 2010, 14:00-17:00, Room 6038)

**LECTURE 4.** Bayesian inference for the general linear models. Non-informative priors. Conjugate priors. Posterior predictive distribution. Bayesian hierarchical models.

(28 January 2010, 9:00-12:00, Room 6038)

**LECTURE 5.** Dynamic linear models. State space models. Kalman filters.

(29 January 2010, 9:00-12:00, Room 6038)

**REFERENCES**

- Bernardo J.M and A.F.M. Smith (1994), *Bayesian Theory*. New York: J. Wiley (Chapter 4.)
- Broemeling, L. D. (1995), *Bayesian Analysis of Linear Models*. Marcel Dekker, New York
- Koop, G. (2005), *Bayesian Econometrics*, John Wiley & Sons, New York

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Thursday, January 21, 2010