



**Dipartimento di Statistica e Metodi Quantitativi
Dottorato in Statistica e Matematica per la Finanza**

Bayesian Statistics: Modelling, computation and testing

Ioannis Ntzoufras - Valen Johnson

DISMEQ, U7 Building, Via Bicocca degli Arcimboldi 8, 20126 Milano

Syllabus

Part I

[May,2015]

Instructor: **Ioannis Ntzoufras** (Athens University of Business and Economics)

- *Introduction to Bayesian Logic*
- *MCMC methods*
- *Bayesian regression analysis*
- *Introduction to Bayesian modelling using Winbugs*
- *Bayesian model and variable selection*

Part II

Instructor: **Valen Johnson** (Texas A&M University, College Station, TX, USA)

- *Review of Bayesian testing procedures and objective Bayes testing methodology*
- *Non-local priors, uniformly most powerful Bayesian tests*
- *Bayesian variable selection revisited, with applications of non-local priors*
- *Latent variable models for ordinal data*
- *Latent variable models for multirater ordinal data and rank data; joint modeling of ordinal and rank data*
- *Introduction to likelihood-free inference and multiple acceptance sampling*

Monday, June 8th: 9.30 – 12.30

Tuesday, June 9th: 9.30 – 12.30

Wednesday, June 10: 9.30 – 12.30

Thursday, June 11: 9.30 – 12.30

Room: Dismeq Seminar Room (room 4026, 4th floor)

The course is targeted at PhD students and young researchers in Statistics, Biostatistics, Econometrics, Economics and Finance, and in any other field dealing with empirical research. Attendance is free. The max. n. of participants is 28, and for organizational reasons we ask to register by sending an email to nicoletta.alghisi@unimib.it

For further information: Prof. Guido Consonni (guido.consonni@unicatt.it)