Specialist Course | Cycle XXXIX

May, 2024 | Campus S. Caterina

Bayesian Data Analysis and Computation

Brunero Liseo – Andrea Tancredi

Sapienza, Università di Roma

May 13	09.30 – 12.00	BL - Prior distributions for Bayesian Inference: Objective vs. Subjective
	15:00 – 17:30	BL - Posterior simulation and Monte Carlo methods
May 14	10.00 – 12.00	BL - Markov Chain Monte Carlo and other computational methods
	14:00 – 16:00	BL – Prediction, Model Selection and Testing
May 16	15.00 – 17.30	AT - MCMC in practice: linear models, generalized linear models and other case studies
May 17	09.30 – 12.00	AT – Mixture models and hierarchical models
	14.30 – 17.00	AT - Approximate Bayesian Computation and sequential Monte Carlo methods

Instructors : BL is Brunero Liseo, AT is Andrea Tancredi

https://www.stat.unipd.it/ricerca/courses-202324-xxxix-cycle

www.stat.unipd.it/ricerca/dottorato-di-ricerca | phd@stat.unipd.it

BAYESIAN DATA ANALYSIS AND COMPUTATION

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Program: please refer to https://sites.google.com/a/uniroma1.it/brulis/insegnamenti for an almost final version of the slides

May, 13th (9.30-12.00) - Room Uggé
Prior distributions for Bayesian Inference: Objective vs. Subjective

Ref. G. Consonni, D. Fouskakis, B. Liseo, I. Ntzoufras, Prior distributions for objective Bayesian analysis, Bayesian Analysis 13 (2), 627-679

May, 13th (15.00-17.30) - Room Uggé
Posterior simulation and Monte Carlo methods

Ref: https://warwick.ac.uk/fac/sci/statistics/staff/academic-research/johansen/teaching/mcm-2007.pdf

May 14th (10.00-12.00) - Room Uggé
Markov Chain Monte Carlo and other computational methods

Ref: https://warwick.ac.uk/fac/sci/statistics/staff/academic-research/johansen/teaching/mcm-2007.pdf

May 14th (14.00-16.00) - Room Uggé
Prediction, Model Selection and Testing

May 16th (15.00-17:30)
MCMC in practice: linear models, generalized linear models and other case studies

Ref. Slides and other material provided by the instructor

May 17th (9.30-12.00) - Room Uggé
Mixture models and hierarchical models

Ref. Slides and other material provided by the instructor

May 17th (14:30 -17:00) - Room Uggé
Approximate Bayesian Computation and sequential Monte Carlo methods

Ref. Slides and other material provided by the instructor