

Advanced Methods in statistical data analysis

Monday, 6 October 2014

Roberto Trotta: Probability theory, Random variables, parent distributions, samples, Central Limit Theorem, Maximum Likelihood, Confidence intervals - DARK lounge (09:00 - 12:30)

Roberto Trotta: Bayesian parameter inference: Bayes theorem and discussion, priors, general Bayesian approach to inference problems, Gaussian linear model - DARK lounge (14:00 - 17:30)

Tuesday, 7 October 2014

Roberto Trotta: Roberto Trotta: Markov Chain Monte Carlo methods, Metropolis-Hastings, Hamiltonian Monte Carlo, Gibbs sampling. Practical and numerical issues. Convergence. - DARK lounge (09:00 - 12:30)

Roberto Trotta: Roberto Trotta - DARK lounge (14:00 - 17:30)

Wednesday, 8 October 2014

Roberto Trotta: Bayesian model selection: Bayesian evidence, computation of the evidence: numerical and analytical methods, example applications in cosmology and particle physics, Look elsewhere effect and Bayes, open challenges - DARK lounge (09:00 - 12:30)