Workshop on Bayesian Data Analysis

24.-28. September 2007

9:00 - 11:00

Department of Physics, LMU München

seminar room 5/15, Schellingstr. 4, München

Lecturer: Prof. Dr. Dr. h.c. Volker Dose,
Max-Planck-Institut für Plasmaphysik

Program:

24.9. Bayesian Principles
product and sum rule • important integrals • prior, likelihood, posterior and evidence • prior misunderstandings • gaussian approximation

25.9. Probability Densities
entropy principle • transformation invariance

26.9. Parameter Estimation
arithmetic mean, scaled individual errors • systematic errors

27.9. Model Comparison
examples • Bayesian information criterion • model classes, significances and Occam's factor

28.9. Various Examples

Recommended Literature:

D.S. Sivia, Data Analysis - A Bayesian Tutorial, Clarendon, Oxford 1996
V. Dose, Die Bayes'sche Variante, Physik Journal 8/2005

Registration:

please send an informal e-mail to adam.muschielok@cup.uni-muenchen.de
Registration deadline: 15. September 2007

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