IN2P3 School of Statistics 2010

lundi 17 mai 2010 - vendredi 21 mai 2010

Autrans

Programme Scientifique

Note that the agenda is provisional
I. Fundamental Concepts
Probability and Statistics
Session of 1h30
Lecturer/Intervenants : **J. Baudot (IPHC)**, **I. Laktineh (IPNL)**

Fits, Method of chi2 and Method of Maximum Likelihood
Session of 1h30
Lecturer/Intervenant : **J. Baudot**, **I. Laktineh**

**
* Statistical tests, limits
* Three sessions of 1h30 (theory and practice)
* Lecturer/Intervenant : Glen Cowan (Royal Holloway, University of London**

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* Example of application : variance & covariance matrix in a cross-section measurement in nuclear physics
* Session of 1 x 1h30
* Lecturer/ Intervenant : Gregoire Kessedjan (LPSC, INP, IN2P3) II. Mutlivariate Discriminant **
* **Discrimination multivariée : introduction théorique**
* session of 2 hrs
* Lecturer/Intervenant : **Balasz Kegl (LAL, IN2P3)**
**Neural Network and NeuroBayes **
Session of 2h00

Lecturer / Intervenant : **Michael Feindt (Karlsruhe Univ.) **

**Neural Network : example of application in top Physics **
Session of 2h00

Lecturer/Intervenant : **Dominic Hirshbuehl (Wuppertal Uni.)**

Boosted Decision Tree and application / Arbres de décision boostés
Session of 2 hrs
Lecturer/Intervenant : **Yann Coadou (CPPM, IN2P3)** ** III. Tools and Framework **
The RooStat Framework
Session of 3 hrs.

Lecturer/Intervenant : **Kyle Cranmer (New York University)**

** Markov Chain Monte Carlo and application in astroparticule**
Session of 2 hrs
Lecturer/Intervenant : **Laurent Derome (LPSC, UJF) **

** Bayesian Analysis Tool**

Session of 2 hrs
Lecturer / Intervenant : Daniel Kollar (CERN)