IN2P3 School of Statistics 2014

lundi 26 mai 2014 - vendredi 30 mai 2014

Autrans Site

Programme Scientifique

Lectures will be given partly in english (Bayesian analysis concepts, profile likelihoods) and partly in french (Fundamental concepts, Numerical tool for bayesian approach, Chi2 and MLM, Boosted Decision Trees, Theory of multivariate discriminant, sPLOT)

I. Fundamental Concepts

Probability and Statistics

2 sessions of 1h30 Lecturer : B. Clement (LPSC)

Bayesian analyses concepts

2 sessions of 1h30 Lecturer : A. Caldwell (MPI, Munich)

1 practice session of 2h Prof. A. Caldwell (MPI, Munich) D. Greenwald (TU, Munich)

Fits, chi2 method and Method of Maximum Likelihood

1 session of 1h30 Lecturer : J. Baudot (IPHC)

Profile Likelihood

1 session of 1h30 Lecturer : W. Verkerke (Nikhef)

2 practice sessions of 1h30: W. Verkerke (Nikhef)

II. Mutlivariate Discriminant, tools and framework

Multivariate discriminant : theoretical introduction

1 session of 1h30 Lecturer/Intervenant : B. Kegl (LAL)

Markov Chain and Profile Likelihoods for Cosmology

1 session of 1h30 Lecturer/Intervenant : S. Henrot-Versille (LAL)

Boosted Decision Tree and application

2 sessions of 1h30

Lecturer/Intervenant : Yann Coadou (CPPM)

Lecturer/Intervenant : Balazs Kegl (LAL)

sPlot: a statistical tool to unfold data distributions

1 session of 1h30 Lecturer/Intervenant : F. Le Diberder (LAL)