Statistical Data Analysis in Experimental Physics
Syllabus
Semester Year

Course Description

A 12 week course focusing on the underlying theory of statistics that drives modern data analysis in experimental techniques in experimental physics. A practical understanding of the theory and techniques will be acquired by writing analysis code in `C++`, using the ROOT data analysis framework and RooFit package. The course will be built around the provided course notes.

Course Topics

1. A Review of Introductory Statistics
2. ...
3. Model Optimization
4. ...

Recommended Texts

- Data Analysis in High Energy Physics: A Practical Guide to Statistical Methods (1st Edition), *Behnke, et al.*
- Statistical Analysis Techniques in Particle Physics: Fits, Density Estimation and Supervised Learning 1st Edition, *Narksy and Porter*
- The RooFit Users Manual
- ...

Grading