

INFN School of Statistics 2017



Sunday, 7 May 2017 - Thursday, 11 May 2017

Hotel Continental Terme, Ischia

Scientific Programme

Probability theory
Introduction to probability theory
Bayesian and frequentist approaches to probability
Random variables, distributions and main properties
Statistical inference
Parameter estimates, properties of estimators
Maximum likelihood method
Pearson and Neyman chi-squares
Hypothesis testing and interval estimation
Hypothesis testing
Goodness of fit
Frequentist and Bayesian upper limits
Multivariate analysis
Complex network analysis
Multivariate discrimination methods
Boosted decision trees
Artificial neural networks
Deep Learning
Statistical software tools
Overview of the main statistical tools
RooFit, RooStats
Usage examples and code demonstrations
Confirmed lecturers:
Roger Barlow (Univ. of Huddersfield)
Olaf Behnke (DESY, Germany)
Glen Cowan (Royal Holloway, London)
Ilya Narsky (MathWorks, USA)
Mario Pelliccioni (INFN Torino)
Antonio Scala (CNR, Rome)
Andrey Ustyuzhanin (Yandex, Russia)