



The Galileo Galilei Institute for Theoretical Physics
Arcetri, Florence



Prospects and Precision at the Large Hadron Collider at 14 TeV

September 1, 2014 - October 24, 2014

The main topics of the workshop include:

- Particle physics in view of the next generation of LHC data
- Precision QCD and electroweak calculations
- New developments in Quantum Field Theory at higher orders and Monte Carlo generators
- Higgs physics, electroweak measurements and new physics searches
- Jet dynamics, parton distribution functions and multiple parton interactions

The workshop aims at bringing together the world experts in precision predictions in QCD and in the electroweak theory for physics at the LHC. Both discovery and precision physics, as well as their interplay, will be addressed in the light of the next generation of data. The program will initially quantify the accuracy of the available theory predictions and subsequently identify and focus on areas where improvements due to coherent action are needed. In order to enhance the prospects for new physics discoveries at the LHC after 2014, the workshop will benefit from the participation of experimentalists actively involved in the measurements of main interest. The fifth edition of HP2 workshop series will take place during the first week (September 3-5, 2014) as a basis for the activities of the rest of the workshop.

Local organizer: Dimitri Colferai

Organizing Committee:

Daniel de Florian (University of Buenos Aires)
Sven Moch (University of Hamburg and DESY, Zeuthen)
Guido Montagna (University of Pavia and INFN, Pavia)
Fulvio Piccinini (INFN, Pavia)