

Dipartimento di Fisica Teorica
dell'Università di Torino

Seminari comuni

Programma Primavera 2011

Venerdì 4 Febbraio
Aula Wataghin, ore 14:30

Chiara Mariotti
(INFN - Torino)

The LHC Higgs Cross Section working group: results and future goals.

The main goal of the Working Group has been to present the status-of-art on Higgs Physics at the LHC integrating all new results that had appeared in the last few years. A significant amount of work has been performed in providing higher-order corrections to the Higgs boson cross sections and pinning down the theoretical uncertainty of the Standard Model predictions. Another goal is the comparison between NLOMC predictions and NNLO calculations within the acceptance of the detectors. The next step in the activities of this Working Group will be the computation of cross sections that include acceptance cuts and differential distributions for all final states that will be considered in the Higgs search at the LHC. The goal is to understand how the K-factors from (N)LO to (N)NLO will change after introduction of cuts and to compare the NNLO differential distributions with the ones from Monte Carlo generators at NLO.