



ID de Contribution: 84

Type: Ordinary

What if the LHC does not find Supersymmetry by the end of 2011/2012?

mardi 15 mars 2011 18:10 (20 minutes)

The ATLAS and CMS experiments have started their quest for Supersymmetry (SUSY). We employ a global fit, using the code Fittino, to existing precision measurements sensitive to SUSY and combine it with the expected exclusion potential of the LHC experiments in the 2011/2012 run assuming between 35pb-1 and 7fb-1 of data. This potential is estimated through realistic procedure using fast detector simulation and builds on the experience of the 2010 LHC run and includes state-of-the-art higher order corrections for the signal cross sections. In the case of non-discovery we investigate the properties of the remaining parameter space. We evaluate the mass spectrum of then-possible SUSY parameter points preferred by precision data and dark matter constraints.

Auteur principal: BECHTLE, Philip (DESY)

Co-auteurs: O'LEARY, Ben (Universitaet Wuerzburg); SARAZIN, Bjoern (DESY); ROBENS, Carsten (Technische Hochschule Aachen); DREINER, Herbert (Universitaet Bonn); DESCH, Klaus (Universitaet Bonn); KRAEMER, Michael (Technische Hochschule Aachen); WIENEMANN, Peter (Universitaet Bonn)

Orateur: BECHTLE, Philip (DESY)

Classification de Session: Beyond the Standard Model

Classification de thématique: Experiment