



Vrije Universiteit Brussel

Lectures on Supersymmetry 4th and 7th of May 2012
Vrije Universiteit Brussel

Dr. Alberto Mariotti (VUB)

“Naturalness, BEH mass and Supersymmetry”

The lectures will start with a review of the radiative corrections to the Brout-Englert-Higgs mass in the Standard Model and the resulting hierarchy problem. The minimal supersymmetric extension of the Standard Model (MSSM) will be introduced with a highlight on the analysis of the Brout-Englert-Higgs potential in this theory, including quantum corrections. Finally, at a moment where the collider experiments provide tantalizing results, the implication of a 125 GeV Brout-Englert-Higgs mass on supersymmetry will be discussed.

Location: Vrije Universiteit Brussel – Campus Oefenplein – 1.G.003 (1st level of building G, room 003; large seminar room of the IIHE) or “CMS centre @ IIHE” (0th level of building G; it will be indicated)

Lecture 1: The Brout-Englert-Higgs mass and the hierarchy problem
(4th of May; 14-17h; 1.G.003)

Lecture 2: The MSSM and its Brout-Englert-Higgs sector
(7th of May; 10-13h, CMS centre @ IIHE)

Lecture 3 : The implications of the collider results on supersymmetry
(7th of May; 14h-16h; CMS centre @ IIHE)

For more information please contact Prof. J. D'Hondt (jodhondt@vub.ac.be)