DESY THEORY WORKSHOP 24 - 27 September 2013 Nonperturbative QFT: ASSOCIATION DESY Hamburg, Germany

Contribution ID: 92

Type: not specified

Strong Electroweak Phase Transition in the MSSM-like Parameter Space

Thursday 26 September 2013 16:30 (20 minutes)

In order to explain the observed baryon asymmetry of the Universe, electroweak baryogenesis requires that the electroweak symmetry breaking occurred via a strong first-order phase transition. As proven more than a decade ago for a (lighter CP-even) Higgs mass m_h <~ 100 GeV, such a condition is fulfilled in the MSSM if the right-handed stop is very light. Recently, the same conclusion was reached for the case m_h ~ 126 GeV by means of two different approaches: lattice simulations and perturbation theory. In this talk we will review these results. Some brief comments on the experimental status of the model will be also provided.

Primary author: NARDINI, Germano (Bielefeld)

Presenter: NARDINI, Germano (Universität Bielefeld)

Session Classification: Parallel Session 1 + 2: Particle Phenomenology and Cosmology & Astroparticle Physics

Track Classification: Cosmology & Astroparticle Physics