



ID de Contribution: 143

Type: Talk

Light neutralino DM in light Higgs scenario related with the CoGeNT, DAMA/LIBRA, and CDMS II results

jeudi 29 juillet 2010 14:40 (20 minutes)

Recently, the CoGeNT collaboration reported the WIMP candidate signal events exceeding the expected backgrounds where light and strongly coupled WIMP models are supported. Motivated by this issue, we analyze a light neutralino dark matter scenario with a light CP-even Higgs mediation in the elastic scattering process, which provides the proper mass and direct detection cross section of the CoGeNT result. To be compatible with the result of LEP experiments, we assume the neutralino is lighter than a half of the Higgs mediator. Such scenario is realized in BMSSM context and model parameters are chosen not to consider the rare decay experiments. We also obtain the right relic abundance on viable parameter space, which makes our scenario highly promising.

Auteurs: Prof. KIM, Hyung Do (Seoul National University); M. BAE, Kyu Jung (Seoul National University); Dr SHIN, Seodong (Seoul National University)

Orateur: Dr SHIN, Seodong (Seoul National University)

Classification de Session: Parallel session : Dark Matter Candidates 2

Classification de thématique: Dark Matter Candidates