



ID de Contribution: 62

Type: **Ordinary**

## Non-standard SUSY spectra in gauge mediation

*mardi 9 mars 2010 18:30 (15 minutes)*

The experimental signatures of supersymmetric extensions of the Standard Model, such as the Minimal Supersymmetric Standard Model (MSSM), depend on the actual spectrum of superpartners, which in turn is determined by the mechanism responsible for the breaking of supersymmetry and for its mediation to the MSSM. An attractive possibility, known as gauge mediation, is that supersymmetry breaking be transmitted by gauge interactions through loops of messenger fields. In this talk, I will discuss the possibility that the messenger fields couple to the Higgs multiplets of an underlying Grand Unified Theory. This leads to rather unusual supersymmetric spectra, with distinctive collider signatures and implications for cosmology.

**Auteur principal:** Dr LAVIGNAC, Stéphane (IPhT Saclay)

**Orateur:** Dr LAVIGNAC, Stéphane (IPhT Saclay)

**Classification de Session:** Standard Model and beyond

**Classification de thématique:** Theory