

SUSY “naturalness” and LHC-14

Wednesday, 17 December 2014 11:30 (1 hour)

The idea of “Natural SUSY”, understood as a supersymmetric scenario where the fine-tuning is as mild as possible, is a reasonable guide to explore supersymmetric phenomenology. I will discuss the probabilistic meaning of conventional fine-tuning measures and re-examine the MSSM naturalness bounds including several improvements; e.g. the role played by potential extra fine-tunings, which must be combined with the electroweak one. I will also discuss what are the most model-independent naturalness bounds and what are the most stringent ones (they do not coincide), in connection to LHC-14.

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