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## The Least Supersymmetric Model at the LHC

*Tuesday 7 May 2013 17:00 (15 minutes)*

We study the implications at the LHC for the minimal (least) version of the supersymmetric standard model. In this model supersymmetry is broken by gravity and extra gauge interactions effects, providing a spectrum similar in several aspects to that in natural supersymmetric scenarios. Having the first two generations of sparticles partially decoupled means that any significant signal can only involve gauginos and the third family of sfermions. In practice, the signals are dominated by gluino production with subsequent decays into the stop sector. As we show, a clear discovery at the LHC is possible at  $\sqrt{s} = 14$  TeV, but will require large integrated luminosities.

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