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## Searches for NMSSM Signatures with Low Missing Transverse Energy at the LHC

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We examine scenarios in the Next to Minimal Supersymmetric Standard Model where squarks and gluinos decay via various two cascades, each ending in a stable neutralino LSP and a standard model Higgs with the mass gaps in the decay such that the Missing Transverse Energy is very small. Performing two-dimensional parameter scans and focusing on the hadronic  $h \rightarrow b\bar{b}$  decay giving a  $b\bar{b}b\bar{b} + \text{MET}$  final state we then explore the sensitivity of a current CMS  $\alpha_T$ -based general-purpose jets+MET analysis to such scenarios with a view to developing novel search approaches in the near future.

### What would be the preferred length of your talk?

20 minutes + questions

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