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# Search for SUSY at CMS in all-hadronic final states (15' + 5')

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A search for new physics is presented based on an event signature of at least three jets accompanied by large missing transverse momentum using a data sample of 36 pbˆ-1 of proton–proton collisions at sqrt(s) = 7 TeV acquired by the CMS detector at the LHC in 2010. There are three main background components. One is irreducible, from Z+jets events, with the Z decaying to neutrinos. A second comes from W+jets and top events where W decay yields a lepton that is not identified or a tau that decays hadronically. The third arises from QCD multi-jets where the missing momentum originates from jet mis-measurements, heavy-flavour decays, or instrumental effects. All these backgrounds are estimated from the data. No excess of events over backgrounds is observed. Exclusion limits are presented for the Constrained Minimal Supersymmetric extension of the Standard Model (CMSSM). Cross section limits are also presented using simplified models with generic particles decaying to one or two jets and an undetected particle.

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