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Search for Supersymmetry in the Coannihilation Region of mSUGRA at the LHC CHRISTOPHER DAVIS, DAVID TOBACK, TERUKI KAMON, WILL FLANAGAN, Texas A&M University, CMS COLLABORATION— In Experimental High Energy Physics, searches for new particles involve being able to determine how well the detector can pass events before any analysis cuts are used for optimization. We have studied the HLT_PFMET150 trigger at the CMS detector at the LHC for use in a search for supersymmetry in the coannihilation region of mSUGRA. We are able to find the efficiency as a function of MHT and also what effect the number of vertices in an event has on the efficiency.

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