

Abstract:

A search for SUSY in low mass mSUGRA test point by looking for purely hadronic top decays in the final states with the CMS at the LHC is presented. Different sources of backgrounds are considered. The negative of the vector sum of the jets is used as a powerful variable to enhance signal against the backgrounds. Two data driven methods are proposed to estimate the number of the background contamination in the SUSY region. The analysis is optimized for an integrated luminosity of 100 pb^{-1} at 10 TeV center of mass energy.