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Search for dark matter in association with a hardronic top quark and a bottom quark TIELIGE MENGKE, Texas Tech Univ, CMS COLLABORATION — A search for dark matter using events containing a hadronically decaying top quark, one b jet arising from initial-state gluon-splitting, no leptons, and a large imbalance in transverse momentum is presented. The data being used were collected from proton-proton collisions at $\sqrt{s} = 13$ TeV with CMS detector at the LHC and corresponding to an integrated luminosity of 137 fb^{-1}. The results are interpreted based on a simplified dark matter model that provides explanation for observed proximity of the dark matter and baryon abundances.

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