Discovering Black Holes Using Top Quarks at ATLAS

TRAVIS BYINGTON, Duke University — The ATLAS detector at the Large Hadron Collider can identify top quarks, which might be produced by non-Standard Model processes such as black hole decays. We explore simulations of black hole production in 7 TeV proton collisions when a top quark is produced in the black hole decay. In this talk, I will discuss prospects for discovering black holes at the LHC using top quark final states.