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Discriminating Supersymmetry and Black Holes at the Large Hadron Collider¹ ARUNAVA ROY, MARCO CAVAGLIA, The University of Mississippi — We assess the distinguishability between supersymmetry and black hole events at the Large Hadron Collider. Black hole events are simulated with the CATFISH black hole generator. Supersymmetry simulations use a combination of PYTHIA and ISAJET. Our study, based on event shape variables, visible and missing momenta, and analysis of dilepton events, shows that supersymmetry and black hole events at the LHC can be easily discriminated.

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