Search for new physics in events with b-jets and missing transverse energy in pp collisions at 7 TeV

WEE DON TEO, Cornell University, CMS COLLABORATION — We present a search for physics beyond the Standard Model (SM) based on events with large missing transverse energy, at least three jets, and at least one identified b-jet. All major SM backgrounds are evaluated using data-driven techniques. The number of events observed is consistent with the SM expectation. We set 95% confidence level upper limits on the cross sections of b-quark-rich simplified models, and exclusion limits in the context of the constrained minimal supersymmetric extension of the SM.