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Search for New Phenomena in Dijet Events in pp Collisions at $\sqrt{s}=13$ TeV with the ATLAS Detector BENJAMIN ALLEN, University of Oregon, ATLAS COLLABORATION — A search for new phenomena produced in LHC proton-proton collisions with data collected during 2015 and 2016 at center-of-mass energy of 13 TeV has been performed with the ATLAS detector. The invariant mass distribution of the two highest transverse momentum jets has been studied and compared against Standard Model QCD background, as well as the angular distribution, derived from the rapidities of the two jets. These distributions have been found to be consistent with the predictions of the Standard Model. In the absence of new phenomena, exclusion limits have been set on a selection of benchmark models, including excited quarks, heavy W bosons, and quantum black holes.

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