

Abstract Submitted
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A Search for New Particle decaying to two Higgs Bosons at the ATLAS Experiment at CERN CALEB MOSAKOWSKI, None, CSU SACRAMENTO TEAM¹, NORTHERN ILLINOIS UNIVERSITY TEAM², ATLAS COLLABORATION — A search for an exotic particle in p-p collisions at a center of mass energy of 13 TeV decaying into two Higgs Bosons which decay further into a pair of b quarks and a pair of photons using the ATLAS detector at CERN is presented . The angular distributions between objects are analyzed for subsequent optimization using a multivariate algorithm (MVA). The goal of this analysis is to identify which combination of these angular distributions can maximize the separation between the signal and background. The results are then fed these into an MVA to find signal and background events in the data. A comparison between Monte Carlo simulation and data from was also performed.

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