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Search for charged Higgs Boson in di-jet resonances along with a charged lepton at $s = 13$ TeV p-p collision with the ATLAS detector
WASIKUL ISLAM, Oklahoma State University-Stillwater, ATLAS COLLABORATION OF CERN COLLABORATION — A search for dijet resonances in events with identified leptons is performed using data collected in pp collisions at $\sqrt{s} = 13$ TeV by the ATLAS detector between 2015 and 2018, corresponding to an integrated luminosity of 139 fb^{-1} . We examine the dijet invariant mass distribution in the range of $0.22 < m_{jj} < 6.3$ TeV. The analysis probes much lower m_{jj} than traditional inclusive dijet searches and is sensitive to a large range of new physics models with a final-state lepton. This talk summarizes the latest search results that are interpolated in the context of a charged Higgs decaying to a top and bottom quarks.

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