

Abstract Submitted
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Search for a heavy resonance decaying into WZ/ZZ final state in proton-proton collisions at 13 TeV using the CMS detector KAMAL LAMICHHANE, Texas Tech Univ — Beyond the standard model theories like Extra-Dimensions predict heavy resonances corresponding to a graviton (a spin 2 particle) dominantly decaying to a pair of standard model bosons. We present the search for heavy resonances decaying to a pair of vector bosons ZZ or ZW, where Z decays to a pair of neutrinos, and W or Z decays to a merged jet due to the boost. The search has been performed using a data sample collected with the CMS detector in 2016 and the results will be interpreted in the context of Randall-Sundrum Warped Extra Dimensions model. Since the W or Z decays to a merged jet, jet substructure techniques are utilized for W- and Z-tagging, which results in better signal selection.

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