

Abstract Submitted
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Title: Seesaw Search with Multilepton Final States using 13 TeV LHC Data¹ GRACE HAZA, Indiana University, CMS COLLABORATION — Results of a search for Seesaw Type-III heavy fermions in final states with at least three charged leptons are presented. The data sample corresponds to 2.1 fb^{-1} of integrated luminosity in proton–proton collisions at $\sqrt{s} = 13 \text{ TeV}$ collected by the CMS experiment at the LHC. Data is binned in exclusive channels by categorizing in various quantities like the number of leptons, missing transverse energy, or whether the event properties are consistent with the production of a Z boson. Sensitivity improves by using transverse mass as a selection variable and is expected to improve substantially with approximately 40 fb^{-1} of integrated luminosity.

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