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Comparison of fourth generation charged leptons various models with 1 or 2 extra dimensions CHRISTINE DIMENNA, ERIN DEPREE, ELLIOT RUSSELL, None — Extra dimensions provide possible solutions to the hierarchy problem and other issues with the Standard Model (SM). The potential for discovery at the Large Hadron Collider (LHC) is huge, but it is essential to know which models can be eliminated based on the observation or lack of observation of various processes. We focus on the production of fourth-generation charged leptons. We compare the cross-sectional areas for heavy charged lepton production in several models: including the Standard Model, warped extra dimensions or Randall-Sundrum (RS) model, and the RS6 model with two extra dimensions. This analysis will help understand the implications of future data from the LHC.

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