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**Search for Resonances in the Dimuon Mass Distribution in pp Collisions at $\sqrt{s} = 7$ TeV** JORDAN TUCKER, UCLA, CMS COLLABORATION — The CMS Collaboration has performed a search for a narrow resonance in the $\mu^+\mu^-$ channel. The data correspond to an integrated luminosity of 40 $\text{pb}^{-1}$ from pp collisions at $\sqrt{s} = 7$ TeV provided by the CERN LHC. Such resonances can arise from new heavy gauge bosons, $Z'$, or Randall-Sundrum Kaluza-Klein gravitons, $G_{KK}$. We present upper limits on the ratio of cross sections times branching fractions $\sigma\left(\text{pp} \to Z'/G_{\text{KK}} + X \to \mu^+\mu^- + X\right)/\sigma\left(\text{pp} \to Z^0 + X \to \mu^+\mu^- + X\right)$.

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