

## LHC Searches for Kaluza-Klein Graviton Decaying into SM/DM Particles

*Tuesday, 4 December 2018 14:30 (30 minutes)*

We study the phenomenology of a massive graviton  $G$  with universal and non-universal (top-philic) couplings to the Standard Model (SM) particles. Such a particle can arise as a warped Kaluza-Klein graviton from a framework of the Randall-Sundrum extra-dimension model. We also consider simplified dark matter models where a dark matter candidate couples to the SM particles via a  $G$  mediator. We study constraints on the model parameter space from the current LHC data. Eur. Phys. J. C 77, no. 5, 326 (2017) (arXiv: 1701.07008) JHEP 1810, 046 (2018) (arXiv:1807.09643)

**Presenter:** YAMASHITA, Kimiko (National Tsing Hua University)

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