



Contribution ID: 12

Type: **not specified**

## Massive spin-2 mediated dark matter

*Sunday 7 October 2018 13:30 (35 minutes)*

A massive spin-2 particle can act as the mediator between dark matter and standard model particles through the energy momentum tensor in the spin-2 mediated dark matter model. The scattering amplitudes between dark matter and standard model particles are examined by effective theory and consisted of effective operators after the mediator is integrated out. The differential event rate with spin-2 mediator can be estimated for direct detection. The spin-2 particle can be produced and bounded through dijet resonance search with mono-photon at the LHC. We discuss the interplay between dark matter relic density condition, direct detection and collider searches.

**Presenter:** KANG, Yoo-Jin (Chung-Ang University)

**Session Classification:** Session 4 : Dark Matter