Contribution ID: **76** Type: **not specified**

The warped dark sector

Thursday 15 August 2019 10:05 (18 minutes)

Five-dimensional braneworld constructions in anti-de Sitter space naturally lead to dark sector scenarios in which parts of the dark sector vanish at high 4d momentum or temperature. In the language of modified gravity, such feature implies a new mechanism for hiding light scalars, as well as the possibility of UV-completing chameleon-like effective theories. In the language of dark matter phenomenology, the high-energy behaviour of the mediator sector changes dark matter observational complementarity. A multitude of signatures—including exotic ones—are present from laboratory to cosmologic scales, including long-range forces with non-integer behaviour, periodic signals at colliders, "soft bombs"events well-known from conformal theories, as well as a dark phase transition and a typically small amount of dark radiation.

Ref: https://arxiv.org/abs/1906.02199

Presenter: Dr FICHET, sylvain

Session Classification: From Models to Signatures