

# **Dark Matter and the Multiverse**

## **Report of Contributions**

Contribution ID: 1

Type: **not specified**

## Luc Darme - Light dark sector EFT and long-lived states

*Tuesday, 10 December 2019 11:00 (45 minutes)*

Dark matter-motivated light dark sectors often feature long-lived hidden sector states, whose presence typically offers bright detection prospects at fixed target experiments and colliders and may lead to strong astrophysical bounds. We will explore the case in which one can apply an effective theory approach to the couplings between light dark sectors and the Standard Model, broadly corresponding to setups where the mediator field cannot be produced on-shell. In particular, we will investigate in detail the production and the semi-visible three-body decays of dark sector states and show that it is a key element of the accelerator phenomenology.

**Session Classification:** Dark Session

Contribution ID: 2

Type: **not specified**

## **Michele Redi - Peccei-Quinn Phase Transitions and Gravitational Waves**

*Tuesday, 10 December 2019 12:00 (45 minutes)*

**Session Classification:** Dark Session

Contribution ID: 3

Type: **not specified**

## **Federica Giacchino - Searches of Light Dark Matter Portals in PADME**

*Tuesday, 10 December 2019 15:30 (45 minutes)*

**Session Classification:** Dark Session

Contribution ID: 4

Type: **not specified**

## **Daniele Teresi - On sliding, hiccupping and the multiverse**

*Tuesday, 10 December 2019 16:30 (45 minutes)*

**Session Classification:** Dark Session