Contribution ID: **77** Type: **Talk**

【314】Dark sectors searches at high-intensity colliders

Tuesday 27 August 2019 18:00 (15 minutes)

Cosmological and astrophysical observations point to the fact that the Standard Model (SM) of particle physics account for less than 5% of the total energy density of our Universe. What remains is defined as dark energy and dark matter (DM). More specifically, indirect gravitational interactions measurements indicate that DM is five times more abundant than ordinary baryonic matter.

The existence of DM does not directly point to a specific mass scale for New Physics (NP), conversely a dark sector of particles not interacting through the known SM forces might exist. These new dark particles could communicate to the SM through so-called “portals”.

This talk will cover dark sectors future and present experimental searches with a specific focus on high-intensity colliders.

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Session Classification: Nuclear, Particle- & Astrophysics

Track Classification: Nuclear, Particle- and Astrophysics (TASK)