



Contribution ID: 52

Type: **Session: Dark Matter and Beyond Standard Model Searches**

Direct Dark Matter Searches

Thursday 3 December 2020 09:30 (1 hour)

Results from cosmological observations show that 85% of the matter in the universe is cold dark matter. However, its fundamental composition remains unknown, with several theoretical proposals for beyond-the-Standard-Model dark matter particle candidates. Because dark matter is bound to the Milky Way galaxy in a “halo,” there should be a measurable dark matter particle flux through Earth. I will present an overview of the field of dark matter direct detection, which aims to observe the interactions of dark matter particles in the halo with instrumented targets on Earth. I will focus on recent trends in the field, in particular the search for “low-mass” dark matter particles with the DAMIC experiment.

Primary author: Prof. CHAVARRIA, Alvaro (University of Washington)

Presenter: Prof. CHAVARRIA, Alvaro (University of Washington)

Session Classification: Plenary talk