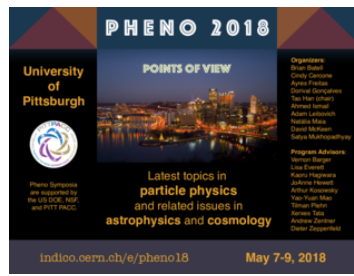


# Phenomenology 2018 Symposium



Contribution ID: 460

Type: parallel talk

## Boosted dark matter search at Xenon1T and ProtoDUNE

*Tuesday 8 May 2018 14:15 (15 minutes)*

I will discuss a novel search strategy of light boosted dark matter at WIMP direct detection experiments (particularly in Xenon1T) and ProtoDUNE, prototype of DUNE far detector.

This is based on the scenarios of boosted DM (BDM) composed of the heavy and light DM components where the heavier one interacts with the Standard Model sector only through the lighter one.

The expected signal is energetic recoil of target, possibly with displaced multi-track events if an inelastic scattering occurs.

This is also based on a first proposal of new physics search at ProtoDUNE.

### Summary

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