



Contribution ID: 180

Type: **Oral**

## Hunting for WIMPs, how low should we go?

*Thursday 10 August 2017 15:15 (15 minutes)*

We discuss direct detection of WIMP dark matter in two benchmark cases: a Majorana fermion that primarily interacts via the Z-boson, and a Majorana fermion whose relic density is primarily set via co-annihilations with colored partners. We discuss the Z-mediated case with reference to a simple UV-completion, the singlet doublet model. We discuss the co-annihilation case with reference to stop co-annihilation in the Minimal Supersymmetric Standard Model. We find that Z-mediated Dark Matter is likely to be largely probed by future experiments, but co-annihilating Dark matter may present a formidable challenge.

**Author:** PIERCE, Aaron (University of Michigan)

**Presenter:** PIERCE, Aaron (University of Michigan)

**Session Classification:** Dark matter

**Track Classification:** Dark matter (direct detection, indirect detection, theory, etc.)