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## A WIMP Status Report: Constraints and Discovery Prospects for Singlet-Doublet Dark Matter

*Thursday 16 May 2024 16:00 (15 minutes)*

For many years, models of weakly interacting massive particles (WIMPs) have been a useful target for direct detection experiments and other probes of dark matter. However, increasingly precise experimental probes have severely constrained the viable parameter space for these models. In this talk, I will review a paradigmatic WIMP model, Singlet-Doublet dark matter. I will introduce the model and discuss the remaining parameter space in light of contemporary experiments. In order to evade constraints, the model must live in special regions of parameter space. I will discuss these special regions, the prospects for probing them in the future, and explain how one might arrange for the model parameters to naturally inhabit them.

### Mini Symposia (Invited Talks Only)

**Primary author:** PETROSKY, Evan

**Co-authors:** PIERCE, Aaron (University of Michigan); BHATTIPROLU, Prudhvi (University of Michigan)

**Presenter:** PETROSKY, Evan

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