

## Phenomenology 2023 Symposium



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# Searching for Dark Matter Annihilation with IceCube and P-ONE

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We present a new search for weakly interacting massive particles utilizing neutrino telescopes. We consider galactic and extra-galactic dark matter and analyze ten years of public IceCube data, setting stringent bounds on massive dark matter annihilation. In addition, we make predictions for P-ONE, a new neutrino telescope in the Pacific Ocean, showing that its sensitivity may even exceed bounds set by gamma-ray experiments. We then present estimates for future searches.

**Author:** MEIGHEN-BERGER, Stephan

**Presenter:** MEIGHEN-BERGER, Stephan

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