

## PHYSICS AND ASTRONOMY COLLOQUIUM

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## Dark Matter at Colliders and in the Sky, and in Canada

Abstract

The talk will present an overview of dark matter research, with a focus on Canadian contributions. There is ever increasing evidence for the existence of dark matter from observations of its gravitational effects in galactic and super-galactic structures. This has spurred many international efforts to observe dark matter also in particle physics interactions in cosmic rays, at colliders, or in nuclear recoil experiments. We will give an introduction to the techniques and the status of dark matter search experiments, and to theoretical models for the nature and origin of dark matter. We will also highlight Canadian research contributions to reveal the nature of dark matter.

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