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Type: **Oral presentation**

Novel probes of dark matter with continuous gravitational waves

Thursday 12 October 2023 09:00 (30 minutes)

The third observing run of advanced LIGO, Virgo and KAGRA brought unprecedented sensitivity towards a variety of quasi-monochromatic, persistent gravitational-wave signals. Continuous waves allow us to probe not just the canonical asymmetrically rotating neutron stars, but also different forms of dark matter, thus showing the wide-ranging astrophysical implications of using a relatively simple signal model. In this talk, I will summarize recent results from searches for dark matter in the form of asteroid-mass primordial black holes, dark matter clouds that could form around rotating black holes, and even dark matter that could interact with the detectors themselves.

Is this abstract from experiment?

Yes

Name of experiment and experimental site

LIGO/Virgo/KAGRA

Is the speaker for that presentation defined?

Yes

Details

Andrew Miller / Nikhef and Utrecht University

Internet talk

Yes

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Session Classification: Plenary Session

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