



ID de Contribution: 28

Type: **Oral presentation**

Search of intermediate mass black holes as dark matter using gravitational microlensing.

jeudi 27 février 2020 17:00 (15 minutes)

Gravitational microlensing constrains massive compact object abundance within the Galactic halo. Past surveys (MACHO, EROS, OGLE, MOA) excluded objects lighter than 10 solar masses as a major component of Galactic dark matter. Recent detections of coalescences of heavier black holes by LIGO/Virgo rekindled the interest in compact objects dark matter. The efficiency of the past microlensing surveys was limited in lens mass by their duration. As they cover several distinct time periods, combining all their databases allows us to obtain very long timescale light curves. As a consequence, we can increase our sensitivity to lenses of mass up to several hundreds of solar masses. I will present and discuss preliminary results from the combination of MACHO and EROS surveys.

Field

Compact objects (supernovae, black holes, neutron stars)

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Classification de Session: Talk

Classification de thématique: Astrophysics