## Théorie, Univers et Gravitation - TUG



ID de Contribution: 37 Type: Non spécifié

## Patrick Valageas (IPhT): Some gravitational aspects of scalar field dark matter

mercredi 11 octobre 2023 09:00 (30 minutes)

Scalar field dark matter models (such as Fuzzy Dark Matter, axion-like particles, ultra-light DM) are interesting dark matter

candidates. Their gravitational dynamics follow the usual CDM behaviours on large scales but differ on small scales because

of wave effects or self-interactions.

I will briefly present two aspects of their gravitational dynamics: the formation of solitons, which could play a role for the

tensions of CDM on galactic scales, and the accretion onto Black Holes, which could provide a probe of such DM clouds

through gravitational waves.

Orateur: VALAGEAS, Patrick (CEA Saclay)