



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)