



Contribution ID: 9

Type: **not specified**

Axion-like particle dark matter and gravitational waves from topological defects

Monday, 27 September 2021 10:50 (25 minutes)

Axion-like particles (ALPs) are a compelling candidate for dark matter (DM). Their production is associated with the formation of a string-wall network. This system must annihilate, producing gravitational waves and non-relativistic ALPs. In my talk I will show that these gravitational waves, if produced at temperatures below 100 eV, could be detected by future cosmological probes for ALPs with mass from 10^{-16} to 10^6 eV, opening a window on ALP DM with arbitrary small couplings to the Standard Model.

Presenter: VITAGLIANO, Edoardo

Session Classification: Monday AM