Contribution ID: 55

Type: poster

## **Poster: ALP leptogenesis**

We propose a novel non-thermal realisation for leptogenesis that relies on the out-of-equilibrium decay of an axion-like particle (ALP) into right-handed Majorana neutrinos (RHN) in the Early Universe, and that it opens the parameter space of successful leptogenesis down to TeV-scale RHNs, with values of  $f_a > 10^{11}$  GeV and  $m_a > 10^4$  GeV for the ALP decay constant and mass.

We also explore the region where the ALP induces a matter-dominated phase and, finally, provide a viable suspersymmetric realisation of ALP leptogenesis which solves the cosmological gravitino problem.

## Would you be interested in presenting a poster? (this will not impact the decision on your talk)

yes

Primary author: CATALDI, Martina (University of Hamburg)

**Co-authors:** MARIOTTI, Alberto (Vrije Universiteit Brussel); SALA, Filippo; VANVLASSELAER, Miguel (VUB); PASCOLI, Silvia (Universita e INFN, Bologna (IT))

Presenter: CATALDI, Martina (University of Hamburg)

Session Classification: Reception and Poster Session