

Session Program

August 31, 2020 to September 4, 2020

FIPs 2020 - Feebly Interacting Particles 2020

Feebly interacting fermion particles

Tue, September 1

2:30 PM

Feebly interacting fermion particles

Session | **Location:** Virtual Only | **Conveners:** Prof. Pilar Hernandez, Silvia Pascoli

14:30 - 15:00

Theoretical introduction to seesaw models and their connection to leptogenesis

Speaker

Marco Drewes

15:00 - 15:25

HNLs and their relation to astroparticle and cosmology (3.5 keV line, BBN, measurement of the absolute neutrino masses (KATRIN, Euclid, etc.)

Speaker

Prof. Oleg Ruchayskiy

15:25 - 15:50

HNLs and their relation (or non-relation) to active neutrino physics (PMNS, δCP , $0 \nu\beta\beta$ decay, $m(\text{lightest neutrino}), \dots$)

Speaker

Jacobo Lopez Pavon

15:50 - 16:10 **coffee break**

16:10 - 16:35

Search for HNLs at extracted beams (neutrino experiments (T2K), NA62-kaon and dump mode, prospects for DUNE)

Speaker

Alexander Izmaylov

16:35 - 17:00 **Search for HNLs at LHCb, ATLAS, CMS: status and prospects**

Speaker

Lesya Shchutska

17:00 - 17:25

Prospects Search for HNLs with SHiP, MATHUSLA, FASER, and CODEX-b

Speaker

Nicola Serra

17:25 - 17:50 **Prospects to search for HNLs at future ee/ep/pp colliders**

Speaker

Oliver Fischer

5:50 PM