

Seminar

Mikko Laine

Univ. Bern

On the relation between low-scale leptogenesis and dark matter

There has been recent interest in leptogenesis induced by "light" right-handed neutrinos, with masses in the GeV range. Apart from accounting for the observed baryon asymmetry, this scenario may produce lepton asymmetries much larger than the baryon asymmetry. A possible consequence of the latter could be keV-scale sterile neutrino dark matter production through the resonantly enhanced Shi-Fuller mechanism. Making use of a "complete" theoretical framework, which tracks both helicity states of the right-handed neutrinos as well as their kinetic non-equilibrium, and solving numerically a set of non-linear evolution equations, we explore to what extent such a minimal scenario could represent a viable explanation for dark matter and baryogenesis.

Tuesday, 28.05.2019, 14:15 Uhr

Place: D6-135