



Contribution ID: 220

Type: Oral

## Testable Baryogenesis and Leptonic CP Violation in Seesaw Models

*Thursday 10 August 2017 16:00 (15 minutes)*

I will revisit the production of baryon asymmetries in the minimal type I seesaw model with two heavy Majorana singlets in the GeV range. Beside the tree level top scattering we include scattering processes on gauge bosons as well as  $1 \rightarrow 2$  processes of Higgs decay and inverse decays, that can contribute significantly to the wash-out effect.

I will show that the region of parameter space that can account for the right baryon asymmetry overlaps considerably

with the future experiment SHIP and FCC sensitivity regions. Finally I will show the relevant implication for determining leptonic CP-violation and actual prediction of the baryon asymmetry from a hypothetical positive measurement in SHiP.

**Authors:** Dr SALVADO, Jordi (Instituto de Fisica Corpuscular, University of Valencia); Prof. HERNANDEZ, Pilar (Instituto de Fisica Corpuscular); Dr JACOBO, Lopez-Pavon (CERN); Dr MARIJA, Kekic (Instituto de Fisica Corpuscular); Dr JUAN, Racker (Instituto de Fisica Corpuscular)

**Presenter:** Dr SALVADO, Jordi (Instituto de Fisica Corpuscular, University of Valencia)

**Session Classification:** Particle physics

**Track Classification:** Particle physics (energy frontier, intensity/precision frontier, other theory)