

Title: Flavored asymmetries for type II seesaw leptogenesis

Author(s): Gonzalez Felipe, R. ^[1,2,3], ^[3,1]

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Abstract: A novel contribution to the leptonic CP asymmetries in type II seesaw leptogenesis scenarios is obtained for the cases in which flavor effects are relevant for the dynamics of leptogenesis. In the so-called flavored leptogenesis regime, the interference between the tree-level amplitude of the scalar triplet decaying into two leptons and the one-loop wave function correction with leptons in the loop, leads to a new nonvanishing CP asymmetry contribution. The latter conserves total lepton number but violates lepton flavor. Cases in which this novel contribution may be dominant in the generation of the baryon asymmetry are briefly discussed.

Keywords: Leptogenesis; Neutrino physics; Seesaw mechanism

KeyWords Plus: Neutrino Masses; Violation; Triplet; Models; Baryogenesis; Mixings; Gauge

Reprint Address: Joaquim, FR (autor de reprint) - Univ Tecn Lisboa, Dept Fis, Av Rovisco Pais, P-1049001 Lisbon, Portugal.

Addresses:

[1] Univ Tecn Lisboa, Dept Fis, P-1049001 Lisbon, Portugal

[2] ISEL, P-1959007 Lisbon, Portugal

[3] Univ Tecn Lisboa, CFTP, Inst Super Tecn, P-1049001 Lisbon, Portugal

E-mail Addresses: ricardo.felipe@ist.utl.pt; filipe.joaquim@ist.utl.pt

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