

Testing Leptogenesis from Observable Gravitational Waves

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We are going to show within a scalar extended seesaw models, leptogenesis can successfully generate sufficient BAU as the CP asymmetry is enhanced by the scalar interactions in the loop. In the meantime, the same scalar is responsible for a first-order electroweak phase transition, which can lead to observable gravitational waves (GWs) in the near future experiments such as eLISA and ultimate-DECIGO. In this scenarios, the BAU is highly correlated to the magnitude of GWs, so can be tested by them.

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