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Baryogenesis from bubble collisions

Thursday 29 May 2025 15:00 (20 minutes)

In this talk I will consider models connecting baryogenesis with first order phase transition. In particular, I will elaborate on scenarios where the required amount of CP-violation originates from the production of heavy particles after true vacuum particles collide. I will focus on the case when both heavy particles are produced on-shell as well as the opposite regime when one of the heavy particles is produced off-shell, subsequently decaying to light Standard Model states. I will elaborate on the phenomenological implications of both scenarios.

Primary authors: MÜÜRSEPP, Kristjan (NICPB, Tallinn and LNF-INFN, Frascati); CATALDI, Martina (University of Hamburg); VANVLASSELAER, Miguel (VUB)

Presenter: MÜÜRSEPP, Kristjan (NICPB, Tallinn and LNF-INFN, Frascati)

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