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Confronting new physics with early universe cosmology

Friday 11 July 2025 17:10 (20 minutes)

In this talk I shall elucidate how early universe cosmology, together with gravity, can provide a window in exploring physics beyond the Standard Model (SM). Typically, I will focus on two long-standing puzzles of particle-cosmology, namely, dark matter and matter-antimatter asymmetry. In this context I will also discuss the role of the primordial gravitational wave (GW), having different origins, in testing such scenarios at the (futuristic) GW experimental facilities.

Presenter: BARMAN, Basabendu **Session Classification:** Plenary