



APPLIED MATHEMATICS SEMINAR

Particle Production During Inflation

by

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Abstract: Particle production during or after slow-roll expansion poses a significant inquiry in cosmology. Conventionally, in the standard model, this phenomenon occurs subsequent to the accelerated expansion phase of the universe, characterised by vacuum-dominated energy density. Following this phase, the energy density of the vacuum undergoes a transfer to other particles, consequently initiating a radiation-dominated era. However, an alternative perspective challenges this standard model, suggesting that particle production occurs during the slow-roll epoch within a thermal system. In this presentation, I aim to discuss recent advancements in both of these paradigms.

Date: Tuesday, February 20, 2024

Time: 18:00-19:00, GMT+3

Place: ZOOM

To request the event link, please send a message to yheydarzade@bilkent.edu.tr.