Contribution ID: **711** Type: **Poster**

Expressing CP Violation in Terms of Bargmann Invariants and Geometric Phases in Kaon Decays and Baryogenesis

Thursday 18 July 2024 20:40 (20 minutes)

We studied the CP violating phases in the neutral kaon oscillations and decays in the effective field theory of kaons, without going into the quark level, and connected the CP violating parameters to the Bargmann invariants and hence to the geometrical phases. We extended this approach to demonstrate how the CP violating parameters appearing in the processes of baryogenesis and leptogenesis are related to the Bargmann invariants, and hence with the geometric phases of those systems. We then concluded on the applications of such a generalized treatment of CP violating phases.

I read the instructions above

Yes

Alternate track

1. Astro-particle Physics and Cosmology

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