



Contribution ID: 5

Type: **Parallel session talk**

Flavour Oscillations in Pseudo-Hermitian Quantum Theories

Tuesday 22 August 2023 16:00 (20 minutes)

I will summarise recent progress in the formulation of flavour mixing and oscillations in pseudo-Hermitian quantum theories with non-Hermitian mass mixing matrices [arXiv: 2302.11666]. Such non-Hermitian quantum theories are made viable by the existence of a discrete anti-linear symmetry of the Hamiltonian, which ensures that single-particle states have real energies. I will describe the self-consistent construction of oscillation and survival probabilities that are consistent with positivity and unitarity, and highlight features of these pseudo-Hermitian flavour oscillations that are unique compared to their Hermitian counterparts.

Collaboration / Activity

Not applicable

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