Type: Covariant QG: Fundamental theory

A new 2+1 coherent spin-foam vertex for quantum gravity

Monday 6 May 2024 17:15 (15 minutes)

This talk reports on a recent proposal for a Lorentzian spin-foam coherent amplitude in 2+1 dimensions, defined for an arbitrary combination of space- and time-like edges. The construction makes use of a new set of boundary coherent states, derived from the correspondence between Majorana spinors and space-like 2+1 vectors. The amplitude is shown to recover the Lorentzian Regge action in the semiclassical limit.

Based on arXiv:2401.10324 and arXiv:2402.05993.

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