

Spinorial Path Integral for Loop Gravity: Coherent states and Spinfoam symmetries

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The spinfoam framework defines transition amplitudes for spin network states of loop quantum gravity. I will review their recent reformulation in terms of spinorial variables allowing to see these amplitudes as coherent state path integrals [1,2,3]. This clarifies their geometrical meaning and at the identification of symmetries: recursion relations for $3nj$ symbols are turned into Hamiltonian constraints satisfied by the spinfoam amplitudes [4,5]. This applies in particular to the derivation of modified FRW equations for quantum cosmology [6].

References

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Frontiers of Fundamental Physics 14 - FFP14,

15-18 July 2014

Aix Marseille University (AMU) Saint-Charles Campus, Marseille

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