## Sixteenth Marcel Grossmann Meeting



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Type: Talk in the parallel session

## Semiclassics of Spin-Foams with Generic Causal Character

Monday, 5 July 2021 17:00 (25 minutes)

The Lorentzian EPRL spin-foam model has been shown to asymptote in an appropriate regime to a Regge-like theory of gravity. Analogous results have recently been obtained for the Conrady-Hnybida (CH) extension of the model, but several questions regarding the amplitudes of time-like triangles remain open. In this talk I will present new progress on the asymptotic analysis of such amplitudes, in particular by proposing an alternative coherent-state parameterization of the theory and by generalizing to non-simplicial polyhedra. I will argue that, unlike for the other cases considered in the CH extension, the amplitude of time-like polygons is not exclusively dominated by Regge-like contributions. Finally I will discuss how the so-called "Cosine Problem" may naturally be avoided.

This talk reports on joint work with Sebastian Steinhaus, soon to be out on the Arxiv.

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