## Sixteenth Marcel Grossmann Meeting



Contribution ID: 935

Type: Talk in the parallel session

## **Causality in Spinfoams**

Monday, 5 July 2021 16:30 (25 minutes)

Current Lorentzian Spinfoams are formulated in terms of a two-complex with spins on faces and intertwiners on edges. In this talk, I discuss how to add a causal structure on wedges. The EPRL model turns out to be given by a sum over these wedge-causal structures. I will show how this sum can be restricted to a single causal configuration and its relation to Engle's proper vertex. [Based on work in collaboration with Pierre Martin-Dussaud]

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Track Classification: Quantum Gravity: Loop Quantum Gravity