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Double copy and homotopy algebras

Wednesday 16 December 2020 15:30 (30 minutes)

There is a series of deep relations between the scattering amplitudes of Yang–Mills theory and those of Einstein gravity, known as *double copy*. This relation has been proven at tree level, but whether it holds at loop level has been a longstanding conjecture. In this talk we resolve this by constructing Lagrangians for Yang–Mills theory and Einstein gravity that manifest the double copy relation and formulate the result in terms of the theory of homotopy algebras (L_∞-, A_∞-algebras).

Based on 2007.13803, joint work with L. Borsten, B. Jurčo, T. Macrelli, C. Sämann, M. Wolf.

Would you be interested in receiving feedback on your talk?

No

Will you be pre-recording your talk?

No

Length of talk

15-25 minutes

Are you happy for your talk to be recorded?

Yes

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