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## Determining the Coaction of two-loop Feynman Diagrams

Wednesday 16 December 2020 12:00 (30 minutes)

The diagrammatic coaction is a conjectural statement regarding the algebraic and analytic structure of Feynman integrals. The beauty of the coaction on Feynman diagrams is that its form can be formulated through simple diagrammatic rules, based on "cutting" and "contracting" subsets of propagators, without any reference to the particular functions that the integrals evaluate to. However, in order to establish the coaction, and determine its precise structure given a particular basis of integrals, one needs to evaluate the corresponding integrals and their cuts and establish the relations between them. In this talk, I will go into the techniques used for the two-loop cut integral evaluations to all orders in the dimensional regularization parameter  $\epsilon$  and how the results can be used to determine the diagrammatic coaction of two-loop Feynman Integrals.

## Would you be interested in receiving feedback on your talk?

Yes

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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