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# **Finite Fields for Di-Photon Amplitudes**

Wednesday 16 December 2020 12:30 (30 minutes)

In this talk I will present the algorithms and techniques employed to efficiently obtain analytic expressions for loop-induced di-photon amplitudes at 5 and 6 legs. I will review the method of reconstruction over finite fields and how it is applied to OPP integrand reduction at one loop. The representation of the amplitudes using Momentum Twistor variables, which ensure that the process only involves rational expressions at every intermediate step, will be introduced. I will discuss advantages and current bottlenecks.

### 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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