

# Two-loop amplitude reduction in the HELAC framework

*Thursday, 12 September 2024 14:30 (25 minutes)*

I will present recent progress in constructing a generic two-loop amplitude reduction algorithm within the computational framework of HELAC. Following the well-known OPP reduction approach at one loop, a two loop amplitude approach is developed. I will also discuss the differences between the  $4-2\epsilon$  and pure 4 dimensional reduction fitting as well as the implications on the so-called rational terms which incorporate the mismatch between 4 and  $D = 4-2\epsilon$  dimensions.

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**Session Classification:** Methods for amplitudes and integrals

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