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JOHANNES GUTENBERG UNIVERSITÄT MAINZ

Theorie-Palaver

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Lorentz room (Staudingerweg 7, 5th floor)

Antonela Matijašić
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Recent progress in planar two-loop six-point Feynman integral computation

The state-of-the-art in current two-loop QCD amplitude calculations is at five-particle scattering. In contrast, very little is known at present about two-loop six-particle scattering processes. In recent years, the results for one-loop hexagon integrals to higher order in the dimensional regulator become available as well as the results on the maximal cut of the planar two-loop six-point integral families. In this talk, I will show the progress made in computing planar two-loop six-particle Feynman integrals beyond the maximal cut using the differential equations method. In particular, I will discuss the canonical basis for several integral families in four space-time dimensions and their function space.

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