Holonomic Techniques for Feynman Integrals



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Canonical differential equations for maximal cuts of hyperelliptic Feynman integrals

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Feynman integrals are the building blocks of multi-loop scattering amplitudes and beyond one loop, many Feynman integrals are related to interesting geometries. In this talk, I will focus on Feynman integrals related to hyperelliptic curves and discuss ongoing work on finding canonical differential equations for maximal cuts of such Feynman integrals. This includes new ideas about the connection between the intersection matrix of a twisted cohomology group related to the maximal cut and the form of its differential equation.

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