

On Hyperelliptic Feynman Integrals, or: What Genus Is It Anyway?

Tuesday 12 December 2023 15:00 (30 minutes)

Multi-loop Feynman integrals are crucial in meeting the requirements for high-precision predictions of both collider and gravitational-wave experiments. Such integrals are associated to geometries, providing information about the function classes appearing in their evaluation. In this talk I will discuss integrals associated to hyperelliptic curves, a natural generalization of elliptic curves. I will show the role that the genus of such curves play, and how there can be multiple different curves associated to the same integral.

Primary author: POEGEL, Sebastian

Presenter: POEGEL, Sebastian

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