

Five-Point Two-Loop Amplitudes Beyond the Planar Limit

Monday, September 9, 2019 2:30 PM (25 minutes)

Scattering amplitudes in supersymmetric theories are known to display many remarkable structures, but most higher loop results are limited to planar theories. In this talk we discuss the structure of the recent, symbol-level, results for the $N=4$ SYM amplitude with full colour dependence and the $N=8$ SUGRA amplitude. We elaborate on the modern, ansatz-based, approach to the calculation. Leading singularities in both 4 and d -dimensions are used to construct a set of rational prefactors upon which the amplitudes are numerically decomposed using finite-field arithmetic.

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Session Classification: Monday Afternoon