## Loops and Legs in Quantum Field Theory



Contribution ID: 7 Type: not specified

## Cuts and Feynman amplitudes beyond polylogarithms

Thursday 3 May 2018 09:30 (30 minutes)

In this talk I will present some of the newest advancements in the calculation of multiloop Feynman amplitudes beyond multiple polylogarithms. In particular, I will show how to solve higher order irreducible differential equations for non-polylogarithmic Feynman integrals and how to write their solution in terms of a suitable basis of functions. I will also comment on the difficulties in embedding these integrals into physically relevant scattering amplitudes for the calculation of important observables for the LHC.

Primary author: TANCREDI, Lorenzo (KIT Karlsruhe)

**Presenter:** TANCREDI, Lorenzo (KIT Karlsruhe)

Session Classification: Parallel 8