Contribution ID: 84 Type: not specified

Loop integral evaluation and asymptotic expansion with pySecDec

Tuesday 26 April 2022 17:30 (30 minutes)

pySecDec is a program to evaluate multi-loop Feynman integrals numerically based on the sector decomposition approach; its new release version 1.5 introduces features significantly improving its performance: automatic adaptive evaluation of weighted sums of integrals (e.g. amplitudes) and asymptotic expansion in kinematic ratios. I'd like to briefly review both, illustrating the expected performance benefits.

Primary author: MAGERYA, Vitaly (UNI/TH (Uni Hamburg, Institut fuer Theoretische Physik))

Presenter: MAGERYA, Vitaly (UNI/TH (Uni Hamburg, Institut fuer Theoretische Physik))

Session Classification: Parallel 1