Contribution ID: **207** Type: **Parallel Talk**

Numerical calculations of Multiple Polylog functions

Wednesday 5 November 2008 16:10 (25 minutes)

Multiple Polylog functions (MPL) often appear as a result of the Feynman parameter integrals in higher order correction in quantum field theory. Numerical evaluation of the MPL with higher depth and weight is necessary for multi-loop calculations. We propose a purely numerical method to evaluate MPL using numerical contour integral in multi-parameter complex-plane. We can obtain values of MPL for any complex variables.

Author: Dr KURIHARA, Yoshimasa (KEK)

Presenter: Dr KURIHARA, Yoshimasa (KEK)

Session Classification: Methodology of Computations in Theoretical Physics - Session 2

Track Classification: 3. Computation in Theoretical Physics