Contribution ID: **70**   Type: **not specified**

Six loop beta function in φˆ4 model

Thursday 23 July 2015 16:20 (30 minutes)

Using R* operation, IBP and integration of hyperlogarithms (HyperInt)
we perform 6 loop calculation of beta function in ϕ^4 model.
One of the remarkable features of this result is that 6 loop term contains multiple zeta values. We discuss different aspects of this calculations as well as series resummation and predictions for 6 loop term based on Kazakov/Shirkov/Tarasov (1979) paper

Author: KOMPANIETS, Mikhail (St. Petersburg State University (RU))

Co-author: PANZER, Erik (Institute des Hautes Etudes Scientifiques)

Presenter: KOMPANIETS, Mikhail (St. Petersburg State University (RU))

Session Classification: CALC2015 Workshop