

Depth reduction for multiple polylogarithms

Wednesday, 12 June 2024 16:00 (1 hour)

The special values of the Dedekind zeta function of a number field F at integer argument n should, according to Zagier's Polylogarithm Conjecture, be expressed via a determinant of F -values of the n -th polylogarithm function. Goncharov laid out a vast program incorporating this conjecture using properties of multiple polylogarithms and the structure of a motivic Lie coalgebra. This led him to formulate his Depth Conjecture and a new strategy for solving the one given by Zagier. We report on progress in this direction since Regulators IV, some in joint work with, or developed by, S.Charlton, D.Radchenko as well as D.Rudenko and his collaborators.

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