Center for Mathematical Physics at Boston University

The geometry of Feynman amplitudes and Landau poles I

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I: The general setup. The second Symanzik polynomial, and the structure of the period integral.
Perturbative quantum field theory associates certain algebro-geometric periods (integrals of rational functions) to Feynman graphs. In addition to the graph, these periods depend on continuous data (masses and momenta). They cry out to be understood in terms of the modern theory of variations of Hodge structures. Of particular interest are those configurations of masses and momenta where the period has a pole.

Wednesday, Oct 28, 12-1pm

Rm 180, Math. Dept. Boston U., 111 Cmmington St.

`http://math.bu.edu/research/mathphys/seminar.html`