Loops and Legs in Quantum Field Theory



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Automated extraction of UV counterterms for arbitrary local operators

Thursday 3 May 2018 12:00 (30 minutes)

Computing the anomalous dimensions of local composite operators present in both renormalisable and nonrenormalisable QFTs is generally challenging due to the presence of many scales and loops. In this talk we present an extension of the local R*method which fully automates this task. By extending the local R* operation to arbitrary QFTs we, transform this problem to one of computing massless propagator integrals, suitable for efficient evaluation with the Forcer program.

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