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## NSPT study of the three-loop lattice gluon propagator in Landau gauge

*Tuesday, 15 June 2010 14:50 (20 minutes)*

By means of Numerical Stochastic Perturbation Theory (NSPT), we investigate the lattice gluon propagator up to the third loop in the limit of infinite volume and at vanishing lattice spacing.

Based on known anomalous dimensions and a parametrization of both the hypercubic symmetry group  $H(4)$  and finite-size effects, we calculate the non-logarithmic contributions iteratively starting with the first-loop expression.

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Talk

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