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Update on the computation of the unquenched Yang-Mills lattice spectrum in the 't Hooft limit

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We report on the continued efforts to measure the glueball and meson spectra of Yang-Mills lattice gauge theories based on the gauge group $SU(N_c)$ in the 't Hooft limit.

We employ a multilevel sampling algorithm to measure glueball correlators to reduce statistical noise in the large time separation limit. The gluon operator basis is composed of spatial Wilson loop with vanishing momentum selected to maximise the orthonogality of the operators and the operator overlap on the lowest lying states. The Observables are measured at different levels of (APE) smearing. We discuss the performance of the algorithm and the details of the computation of the first low-lying spectrum for the gauge group $SU(6)$.

Parallel Session (for talks only)

Vacuum structure and confinement

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