

On the calculation and use of non-zero momentum correlators in lattice simulations.

Thursday, July 26, 2018 11:00 AM (20 minutes)

In lattice simulations one generally projects correlators over zero spatial momentum to calculate masses and related spectral data. The sum over space lattice points, however, discards information which may be useful especially in the calculation of disconnected diagrams. I will show that, by using momentum conservation, the calculation of non-zero momentum components of disconnected diagrams and other quantities related to space convolutions can be done with little additional computational cost and I will discuss how these calculations might be useful in the analysis of disconnected correlators. (With the LSD collaboration.)

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