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Developments on analytic continuation from imaginary chemical potential

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Computations at imaginary values of chemical potential is one of the most popular ways to tackle the sign problem in lattice simulations.

For this reason, it is important to study different ways to perform the analytic continuation to the real axis. In the context of the Bielefeld-Parma collaboration, we have been generating data which fed our multi-point Padé analysis of the QCD phase diagram.

We report on our studies on different techniques to perform the analytic continuation comparing the different systematic effects.

In particular, we will compare results coming from a method based on Cauchy integral formula with what we get from more traditional methods, including the analytic continuation of multi-point Padé approximants.

Parallel Session (for talks only)

QCD at nonzero temperature and density

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