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The curvature of the pseudocritical line from lattice QCD: Taylor expansion and Analytic continuation compared

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The $T-\mu$ phase diagram of QCD is, both theoretically and experimentally, still largely unknown. On the theoretical side, lattice QCD is the only reliable tool to investigate the region close to the $\mu=0$ axis. I will present our determinations of the curvature of the chiral pseudocritical line from $N_f=2+1$ lattice QCD at the physical point as obtained by adopting different approaches. I will directly compare the method of the analytic continuation from imaginary chemical potential with the method of Taylor expansion.

Content type

Theory

Collaboration

Centralised submission by Collaboration

Presenter name already specified

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