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The curvature of the crossover line in the (T, μ) -phase diagram of QCD

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An efficient way to study the QCD phase diagram at small finite density is to extrapolate thermodynamical observables from imaginary chemical potential. The phase diagram features a crossover line starting from the transition temperature already determined at zero chemical potential. In this talk we focus on the curvature of this line at $\mu = 0$. We present the extrapolation of the crossover temperature based on three observables at several lattice spacings. The simulations were performed at zero and at moderate values of the imaginary chemical potential, always in the strangeness neutral point. We used the Symanzik-improved gauge action with four times stout smeared staggered fermions.

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