

# Meson correlation functions at high temperature QCD: $SU(2)_{CS}$ symmetry vs. free quarks

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We report on the progress of understanding spatial correlation functions in high temperature QCD. We study isovector meson operators in  $N_f=2$  QCD using domain-wall fermions on lattices of  $N_s=32$  and different quark masses. It has previously been found that at  $\sim 2T_c$  these observables are not only chirally symmetric but in addition approximately  $SU(2)_{CS}$  and  $SU(4)$  symmetric. In this study we increase the temperature up to  $5T_c$  and can identify convergence towards an asymptotically free scenario at very high temperatures.

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