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Axial U(1) symmetry and mesonic correlators at high temperature in $N_f = 2$ lattice QCD

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We measure the connected and disconnected mesonic correlators and screening masses in the high-temperature phase of $N_f = 2$ QCD. Gauge ensembles are generated with Mobius domain-wall fermions, while the observables are calculated with a reweighting to achieve more precise chiral symmetry. We confirm the restoration of axial U(1) symmetry for small quark masses. At a larger quark mass, the $U(1)_A$ is broken and long-distance correlations are observed in the isospin singlet channels.

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