

Pseudoscalar Screening Mass at Finite Temperature and Magnetic Field

We present lattice QCD results on the screening mass of pseudoscalar mesons at finite temperatures and nonzero magnetic fields. The results, which have been continuum extrapolated, are based on (2+1)-flavor lattice QCD simulations at the physical point using the HISQ/tree action, with a lattice temporal extent ranging from 8 to 16. The investigated temperature range is near the pseudocritical temperature, and the magnetic field ranges from 0 to 1 GeV². We will discuss the dependence of the screening masses of various pseudoscalar mesons on temperature, magnetic field strength, and quark mass.

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