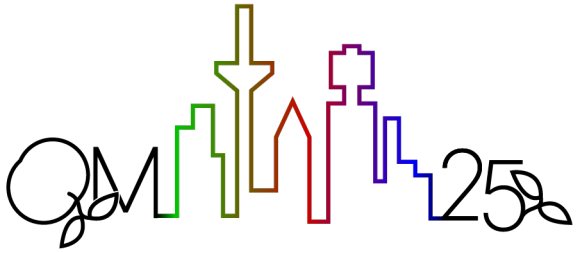

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The moat regime in QCD

Dense QCD matter may exhibit crystalline phases. Their existence is reflected in a moat regime, where mesonic correlations feature spatial modulations. We study the realtime properties of pions at finite temperature and density in QCD in order to elucidate the nature of this regime. We show that the moat regime arises from particle-hole-like excitations near the Fermi surface. This gives rise to a characteristic enhancement of the pion's spectral function at nonzero spacelike momentum.

Category

Theory

Collaboration (if applicable)

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