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# Electrical conductivity and light vector-meson dissociation across the deconfinement phase transition in two flavor lattice QCD

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We present results on the isovector vector channel spectral functions at vanishing momentum across the deconfinement phase transition in dynamical $n_f = 2$ lattice QCD. Using Wilson-Clover fermions the calculations are carried out with a vacuum pion mass of $\simeq 270$MeV at the temperatures $T/T_c = 0.156, 0.8, 1.0, 1.25$ and 1.67. The spectral functions are reconstructed from local-conserved vector correlation functions by fitting a phenomenologically motivated Ansatz and enforcing exact sum rules to the data. We show results for the electrical conductivity across the deconfinement phase transition and find evidence for the dissociation of the $\rho$-meson. In addition we apply the Backus-Gilbert method to our data and compare kinetic theory predictions and previously published phenomenological spectral functions to our lattice study.

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