Critical temperature in QCD with two flavors of dynamical quarks

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Abstract: We present results obtained in QCD with two flavors of non-perturbatively improved Wilson fermions at finite temperature on $16^3 \times 8$ and $24^3 \times 10$ lattices. We determine the transition temperature in the range of quark masses $0.6 < m_\pi/m_\rho < 0.8$ at lattice spacing a≈0.1 fm and extrapolate the transition temperature to the continuum and to the chiral limits and discuss the order of phase transition.