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QCD critical point, universality, and small quark mass[1] MANEESHA SUSHAMA PRADEEP, MIKHAIL STEPHANOV, University of Illinois at Chicago — The universality of the QCD equation of state near the critical point is expressed by mapping QCD pressure onto the Gibbs free energy in the Ising model. The mapping parameters are, in general, not universal, i.e., determined by the unknown details of the microscopic physics, rather than by symmetries and universal long-distance dynamics. We point out that in the limit of small quark masses, when the critical point is close to the tricritical point, the mapping parameters show certain *universal* dependence on the quark mass and discuss possible phenomenological consequences of these findings.

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