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2+1 flavor fine lattice simulation at finite temperature with domain wall fermions

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Simulations for the thermodynamics of the 2+1 flavor QCD are performed employing chiral fermions. The use of Möbius domain wall fermions with stout-link smearing is most effective in the finer lattices where the relevant SU(2) and U(1) chiral symmetries in the chiral limit is approximated to higher degree in the simulation. We report on an initial attempt to locate the (pseudo) critical point using the line of constant physics with an average up and down quark mass slightly heavier than physical and the physical strange mass at $a <\tilde{}$ 0.1 fm.

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