

Abstract Submitted  
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**Chiral and deconfinement transition in QCD** PETER PETRECKZY, BNL, HOTQCD COLLABORATION — I present results on the chiral and deconfinement aspects of the QCD transition at finite temperature. Calculations have been performed using the highly improved staggered quark (HISQ) action with lattices of temporal extent  $N_\tau = 6, 8$  and  $12$ , which allow one to control the approach to the continuum limit. While this action is superior to all previous improved staggered quark actions, it has been demonstrated that in the continuum limit the previously used asqtad action gives consistent results. For the chiral transition temperature we find  $T_c = 157 \pm 6$  MeV.

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