

Update on the critical endpoint of the finite temperature phase transition for three flavor QCD with clover type fermions

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We presented “Critical endpoint of finite temperature phase transition for three flavor QCD”, results for the critical endpoint of finite temperature phase transition of $N_f = 3$ QCD at zero chemical potential. We employ the renormalization-group improved Iwasaki gauge action and non-perturbatively $O(a)$ -improved Wilson-clover fermion action. The critical endpoint is determined by using the intersection point of kurtosis for the temporal size $N_t=4, 6, 8$. Spatial sizes of $N_t=6-16$ ($N_t=4$), $10-24$ ($N_t=6$), and $12-24$ ($N_t=8$) are employed.

Reference:

Xiao-Yong Jin, Yoshinobu Kuramashi, Yoshifumi Nakamura, Shinji Takeda, Akira Ukawa, Critical endpoint of finite temperature phase transition for three flavor QCD, Phys. Rev. D in press. [arXiv:1411.7461].

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