



Contribution ID: 364

Type: **Poster**

B8: Finite temperature phase transition for three flavor QCD with Möbius-domain wall fermions

Wednesday, 28 July 2021 08:45 (15 minutes)

The nature of the finite temperature phase transition in 2+1 flavor QCD depends on the quark mass, and the order and universal class of the phase transition are shown in a diagram called the Columbia plot.

The region of light quark masses in this diagram is not yet fully understood.

We present preliminary results of a three-flavor QCD study using Möbius-domain wall fermions to search for the critical endpoint in the light quark mass region on the diagonal line of the Columbia plot.

Primary authors: NAKAMURA, Yoshifumi; AOKI, Yasumichi (RIKEN); HASHIMOTO, Shoji (KEK); KANAMORI, Issaku (R-CCS, RIKEN); KANEKO, Takashi (KEK)

Presenter: NAKAMURA, Yoshifumi

Session Classification: Poster

Track Classification: QCD at nonzero Temperature and Density