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Staggered rooting and unphysical phases at finite baryon density

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The phase diagram at finite density is of great interest. In the literature, calculations are dominated by rooted staggered fermions. In continuum QCD at finite isospin density, there is pion condensation transition. We observe the reminants of such transition at finite lattice spacings as well at nonzero baryon density. In this talk, we discuss how this can be attributed to the ambiguity of staggered rooting at finite baryon chemical potential.

Topical area

QCD at Non-zero Density

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