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Lefschetz-thimble method for evading the mean-field sign problem

Tuesday 29 September 2015 16:30 (2 hours)

Lefschetz-thimble method is a recently developing tool to evaluate the path integral with the sign problem. In the case of finite-density QCD and its effective models, the fermion sign problem causes some illness even within the mean-field approximation. We showed that the sign problem appearing in the mean-field approximation can be completely solved by applying this technique. We will consider its application to the heavy-dense quark system in order to demonstrate its usefulness.

On behalf of collaboration:

NONE

Author: TANIZAKI, Yuya (The University of Tokyo)

Co-authors: Dr NISHIMURA, Hiromichi (Bielefeld University); Dr KASHIWA, Kouji (Yukawa Institute for Theoretical Physics, Kyoto University)

Presenter: TANIZAKI, Yuya (The University of Tokyo)

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