



Contribution ID: 233

Type: **Poster**

Study of the conformal phase of the SU(3) gauge theory with domain-wall fermions

Wednesday, 15 July 2015 18:30 (2h 30m)

We study the vacuum structure of the SU(3) gauge theory with the flavor number within the conformal region. We perform numerical simulation employing the massless Domain-Wall fermions with the one-step stout smearing.

We investigate a conjecture based on the idea of “the conformal field theories with an IR cutoff”, which was recently studied using the Wilson fermions. Dealing with the Polyakov loops, the pseudo-scalar correlators and the anomalous mass-dimension, we collect further supporting evidence of this conjecture.

Primary author: Dr NOAKI, Jun (KEK)

Co-authors: Dr COSSU, Guido (KEK High Energy Accelerator Research Organization); Mr ISHIKAWA, Ken-Ichi (Hiroshima University, Department of Physical Science); Prof. YOSHIE, Tomoteru (Univ of Tsukuba); Prof. IWASAKI, Yoichi (Tukuba University)

Presenter: Dr NOAKI, Jun (KEK)

Session Classification: Poster Session

Track Classification: Theoretical Developments