



Contribution ID: 41

Type: **Talk**

Topological susceptibility in finite-temperature (2+1)-flavor QCD with gradient flow

Wednesday, August 3, 2016 12:15 PM (25 minutes)

We study the temperature-dependence of the topological susceptibility, determined in (2+1)-flavor QCD with improved Wilson quarks. To calculate the topological charge and its susceptibility, we adopt the gradient flow method. With heavy up and down quarks ($m_{PS}/m_V \approx 0.63$) and approximately physical strange quark, we study in the range $T = 174 - 697$ MeV.

Author: Prof. KANAYA, Kazuyuki (CiRfSE, Univ. Tsukuba)

Co-authors: Prof. SUZUKI, Hiroshi (Kyushu University); Prof. KITAZAWA, Masakiyo (Osaka Univ.); Mr WAKABAYASHI, Naoki (Niigata Univ.); Mr IWAMI, Ryo (Niigata Univ.); Dr EJIRI, Shinji (Niigata University); Dr UMEDA, Takashi (Hiroshima Univ.); Dr TANIGUCHI, Yusuke (University of Tsukuba)

Presenter: Prof. KANAYA, Kazuyuki (CiRfSE, Univ. Tsukuba)

Session Classification: Wednesday AM

Track Classification: Bulk properties of the quark-gluon plasma