



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.

**Primary 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