

Abelian and monopole dominance without gauge fixing in pure SU(3) gauge theory

Thursday, 6 August 2020 17:00 (20 minutes)

Understanding the color confinement mechanism is not yet solved in QCD. The dual Meissner effect is one of the most promising pictures as the color confinement mechanism. Recently the dual Meissner picture due to violation of the non-Abelian Bianchi identities was proposed. In this talk, we show numerical results based on that picture in pure SU(3) gauge theory, especially almost perfect Abelian dominance and monopole dominance for the static q - \bar{q} potential without gauge fixing.

Primary author: ISHIGURO, Katsuya (Kochi University)

Co-authors: HIRAGUCHI, Atsuki; SUZUKI, Tsuneo

Presenter: ISHIGURO, Katsuya (Kochi University)

Session Classification: Vacuum Structure and Confinement

Track Classification: Vacuum Structure and Confinement