Contribution ID: **37** Type: **Talk**

Nuclear symmetry energy in QCD phase

In dense quark phase, one can imagine two situation. Normal quark pahse and color superconducting phase. For the normal phase, the quark matter symmetry energy can be obtained from hard dense loop(HDL) resummed grand potential. It reduces symmetry energy. In superconducting phase, symmetry energy becomes almost 3 times of one for the normal matter as liberal degree of freedom reduces to 1/3 of the normal matter. We expect that the reduction of symmetry energy by HDL becomes vanish in 2SC phase as the rest mass can not be asymmetrized as in normal phase. Updated results will be presented.

Primary author: Mr JEONG, Kie Sang (Yonsei Univ.)

Presenter: Mr JEONG, Kie Sang (Yonsei Univ.)