

Strange to non-strange ratios in the SU(3) NJL-like models

Thursday, 2 March 2023 14:40 (20 minutes)

A sharp peak in the ratio of strange to non-strange mesons in relativistic heavy-ion collision is discussed in the framework of the SU(3) Polyakov-loop extended NJL model with vector interaction. In the model, the K^+/π^+ ratio was calculated along the chiral phase transition line for different values of the vector coupling g_V . We showed that the value of the vector coupling had no significant effect on the K^+/π^+ behaviour. We present a comparison with the experimental pattern of kaon-to-pion ratios within the Beth-Uhlenbeck approach and using x -dependent pion and strange quark potentials. The brief discussion of the possibility to describe the Λ/π^- ratio in the frame of PNJL model is presented.

Primary author: FRIESEN, Alexandra (Joint Institute for Nuclear Research)

Presenter: FRIESEN, Alexandra (Joint Institute for Nuclear Research)