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Influence of chiral imbalance on color superconductivity phenomenon

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Phase structure of quark matter with chiral and isospin imbalance is considered in the framework of effective models. There has been considered as two color as well as three color QCD. It was shown that chiral imbalance has several rather peculiar properties such as being universal catalyzer, i. e. it catalyzes all the considered symmetry breaking patterns in the system, including the diquark condensation phenomenon (color superconductivity). Duality properties found earlier have been considered in this case.

Part of the talk is based on [1-5].

References:

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