

Hybrid stars with large strange quark cores

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The possible existence of hybrid stars is studied using several multi-quark interaction channels. The hadronic phase consists of an EOS with presently accepted nuclear matter properties and the quark model constrained by the vacuum properties of several light mesons. The dependence of several NS properties on the different quark interactions is analyzed. We show that the present constraints from neutron stars observations allow for the existence of hybrid stars with a large strangeness content and large quark cores.

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