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Abstract: The strange quark matter hypothesis is one of the most exciting speculations of the XX Century Physics. If this hypothesis is correct, the ground state of the matter would be the strange matter, which could form the core of compact objects like neutron stars or even more exotic objects like quark stars. Due to the high-density and low-temperature regime in these stars, the interaction between quarks through gluon exchange could favor the appearance of a color superconducting state, significantly modifying the equation of state of the system. In this paper we present a general overview of this Subject, taking also into account the effect of strong magnetic field in the quark stars.

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