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Abstract: We review the stability of magnetized strange quark matter (MSQM) within the phenomenological MIT bag model, taking into account the variation of the relevant input parameters, namely, the strange quark mass, baryon density, magnetic field and bag parameter. A comparison with magnetized asymmetric quark matter in beta-equilibrium as well as with strange quark matter (SQM) is presented. We obtain that the energy per baryon for MSQM decreases as the magnetic field increases, and its minimum value at vanishing pressure is lower than the value found for SQM, which implies that MSQM is more stable than non-magnetized SQM. The mass-radius relation for magnetized strange quark stars is also obtained in this framework.

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