

The Single Flavor Color Superconductivity in a Magnetic Field.

We investigate the single flavor color superconductivity in a magnetic field. Because of the absence of the electromagnetic Meissner effect, forming a nonspherical CSC phase, polar, A or planar, does not cost energy of excluding magnetic flux. We found that these nonspherical phases do occupy a significant portion of the phase diagram with respect to magnetic field and temperature and may be implemented under the typical quark density and the magnetic field inside a compact star.

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