

STRUCTURE OF STRANGE DWARFS

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In 1995, Glendenning et al. [1] postulated the existence of some exotic kinds of compact stars resembling white dwarfs but containing a very dense core made of strange quark matter. The surrounding layers consisting of a crystal lattice of nuclei in a degenerate electron sea were described by the same equation of state of BPS [2] as for the outer crust of a neutron star. In this work, we will revisit the structure of these stars using more realistic models taking into account different possible compositions.

References

- [1] N.K. Glendenning, C. Kettner, and F. Weber, *Astrophys. J.* 450, 253-261 (1995)
- [2] G. Baym, C. Pethick, and P. Sutherland, *Ap. J.* 170, 299 (1971)