

Importance of strange star model in X-ray astronomy

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ABSTRACT: The possible existence of strange stars in the universe will help in the understanding of various properties of quantum chromodynamics and will also help to understand various observed phenomena. With our equation of states, we found that for strange stars, surface tension is no more a property of the matter, rather it becomes the property of the object *i.e.* surface tension depends on the size and structure of the star and is three times larger than the conventional value. With our estimated value of surface tension, we explained the frequency shift of the peak in the power density spectrum (burst oscillation) of type I X-ray burst as the onset of the surface waves. We have also studied the properties of these surface waves.