

Hot neutron stars with microscopic equations of state

Friday, 23 August 2019 15:55 (15 minutes)

We study the properties of hot beta-stable nuclear matter using equations of state derived within the Brueckner-Hartree-Fock approach at finite temperature including consistent three-body forces. Simple and accurate parametrizations of the finite-temperature equations of state are provided. The properties of hot neutron stars are then investigated within this framework, in particular the temperature dependence of the maximum mass. We find very small temperature effects and analyze the interplay of the different contributions.

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Session Classification: Young Scientist Session 2