ID de Contribution: **9** Type: **Oral presentation**

Use of unified equations of state in the modelisation of neutron star macroscopic parameters

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The core of neutron stars involve such high densities that its matter cannot be reproduced in laboratories. There is however a chance to probe the interior of those compact stars via observation of macroscopic parameters such as the mass, the radius, the moment of inertia or the tidal deformability. We propose to give insight in the consequences of using nuclear models calculated non consistently for the core and and the crust. Constructions of matched equations of states found in the litterature are evaluated with regards to the modelisation of neutron star parameters and compared to promised precision of measurements from present and future generation of telescopes.

Field

Compact objects (supernovae, black holes, neutron stars)

Day constaints

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