

Neutron stars and nucleons: are they so different?

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The internal structure of both neutron stars and nucleons is poorly known. Based on recent works on the energy-momentum tensor, we observe interesting similitudes between these systems and suggest that new features and constraints could be derived by analogy. On the one hand, stability studies performed in the context of neutrons stars could be applied to a nucleon system, leading to new inequalities for generalized parton distributions of the nucleon. On the other hand, the study of the nucleon internal structure may lead to more a realistic modelling of neutron stars.