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Gravitational probe to the equations of state at subhadronic level

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I will start by introducing a gravitational theory that string theory predicts. It differs from general relativity, and can probe not only the mass but also pressure, hence generically equations of state parameters. For the theory to be consistent with observations, ordinary baryonic matter should be ultra-relativistic, which may be so at subhadronic level. This talk is based on a work with Kang-Sin Choi: *Post-Newtonian Feasibility of the Closed String MasslessSector* (https://arxiv.org/abs/2202.07413) which will soon appear in PRL. The basic question I would like to ask to the experts in the audience is *what is the pressure inside baryons*?

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