

Abstract Submitted
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Recent progress with *ab initio* calculations of the nuclear equation of state¹ FRANCESCA SAMMARRUCA, University of Idaho — The properties of dense nuclear matter is a topic of current interest. More empirical information is becoming available through heavy-ion collision data and astrophysical observations, which can help set constraints on the equation of state (EOS) of nuclear matter in different density regions ². In this contribution, I will present recent progress within the *ab initio* approach pursued by my group. Our goal is to gain a broad overview over nuclear matter properties, especially under the “exotic” conditions of isospin and spin asymmetry. Moreover, the impact of non-nucleonic degrees of freedom on the EOS at higher densities will be discussed.

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²T. Klähn *et al.*, Physical Review C **74**, 035802 (2006)

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