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Nuclear Matter properties from the ladder resummation method

Tuesday, 9 July 2024 14:55 (20 minutes)

In this talk I will present a method to compute the properties of dilute nuclear matter from quantum field theory at finite density. This approach provides a parameter-free calculation of the energy per particle of nuclear matter relying only on experimental nucleon-nucleon phase shifts. As a practical application we will show our predictions for the equation of state of dilute symmetric and neutron matter. Our result for dilute neutron matter can be used to calculate the equation of state of neutron stars, as Eva Lope Oter will show in her talk.

session

H. Equation of State and Neutron Stars

Primary authors: ALARCON, Jose Manuel (University of Alcala); OLLER BERBER, José Antonio (Universidad de Murcia)

Presenter: ALARCON, Jose Manuel (University of Alcala)

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