

Theoriekolloquium

Am **10. Dezember 2015** um **14.15 Uhr** in **W2 1-143** hält

Herr Prof. Dr. Hans Feldmeier (Darmstadt)

einen Vortrag mit dem Titel

**Fermionic Molecular Dynamics for exotic nuclear structures,
(why mankind has already appeared in the universe)**

This abstract would not have been written at the present time, where there not a special excited state in the nucleus of Carbon. This so called Hoyle state cannot be understood in the conventional shell model – almost free nucleons moving in their mean field. A closer look reveals a diversity of exotic states in light nuclei, which are produced in fusion processes in stars like our sun. The discussed Fermionic Molecular Dynamics model includes both, shell model and cluster configurations, as well as nuclear haloes and many-body scattering states. Analysis of the many-body eigenstates using a realistic nucleon-nucleon interaction allow in a very clear and descriptive way to understand the diversity of structures.

Interessierte sind herzlich eingeladen.

gez. Prof. Dr. Jutta Kunz