

FRONTIERS IN NUCLEAR THEORY: FROM LIGHT NUCLEI TO ASTROPHYSICS

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Wednesday, February 22, 2012 ❖ 4:00 P.M. ❖ NSH 118
(Refreshments at 3:30 P.M. NSH 202)

Ab-initio nuclear theory aims at a comprehensive study of the properties of nuclei starting from strongly interacting protons and neutrons.

The forces among nucleons are linked to the fundamental theory of quantum-chromo dynamics via an effective field theory. The description the complex nature of nuclei arising from such forces is becoming reality and one can aim at a unified description of structure and reaction properties. This is fundamental to understand the role of nuclei in astrophysics. I will show state-of-the-art calculations of structure and reactions of light nuclei and connect to astrophysics.

Colloquium

All interested persons are cordially invited to attend.