

SEMINÁŘ OTF ÚJF, ŘEŽ

**TOMÁŠ DYTRYCH**

(Louisiana State University, USA)

**Emergence of Collective Modes  
in Light Nuclei from First Principles**

**Abstrakt**

In this talk, I will discuss challenges of a large-scale modeling of atomic nuclei and will introduce a novel method, the symmetry-adapted no-core shell model. This approach unveils the emergence of orderly patterns that favor spatial configurations with strong quadrupole deformation and complementary low intrinsic spin values. Such a feature is consistent with the symplectic model of the nuclear collective motion and can be used to expand the reach and predictive power of first-principle studies.

**Seminář se koná v pátek 6. 2. 2015 v 10:30 hod.  
v seminární místnosti OTF ÚJF Řež**

A. Ciepły/otf