

# Proton-neutron pairing correlations in nuclei: a shell model perspective

*Friday, 19 November 2010 14:25 (40 minutes)*

Correlations in nuclei are generally well described by the shell model with residual interaction. The proton-proton (p-p) and neutron-neutron (n-n) pairing interaction leads to the well-known odd-even effects, but the requirement of good isospin symmetry for the residual interaction may have as outcome proton-neutron (p-n) pairing effects, especially in  $N \sim Z$  nuclei. In my talk I will examine potential p-n pairing signals, such as the staggering of proton occupation probabilities, suggested by recent shell model calculations.

**Presenter:** Prof. HOROI, Mihai (CMU, USA)