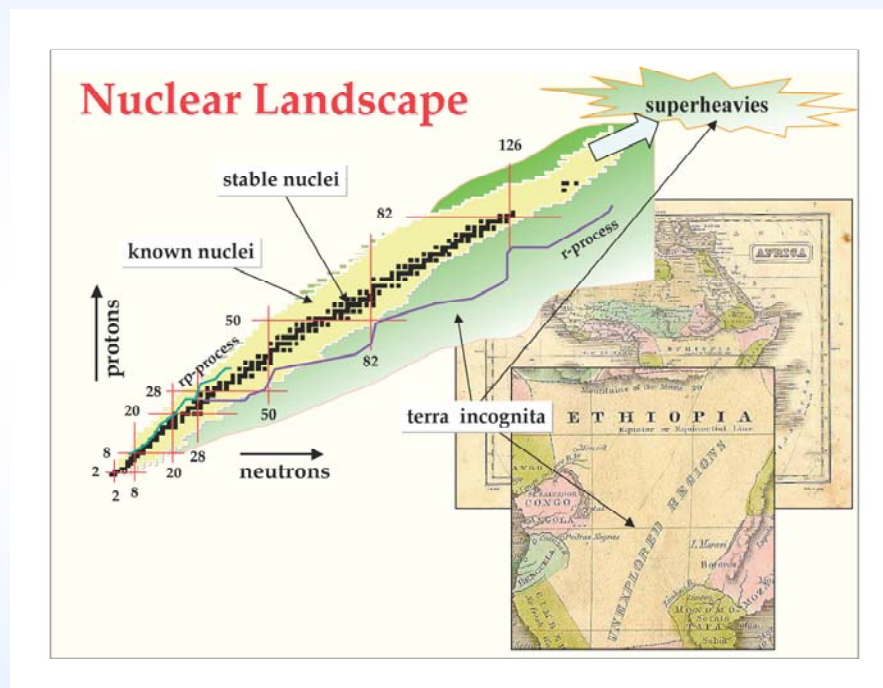




## ΣΕΜΙΝΑΡΙΟ

# Atomic nuclei at the border of stability



**Prof. Peter Ring**

Physics Department, Technical University Munich

Τετάρτη 12 Νοεμβρίου 2008, ώρα 12<sup>00</sup> π.μ.

Αίθουσα A<sub>31</sub> της ΣΘΕ



Από τις 11:45 θα σερβίρονται αναψυκτικά, βουτήματα κ.λ.π.

# **Atomic nuclei at the border of stability**

**Prof. Peter Ring**

Physics Department, Technical University Munich

Worldwide new experimental facilities with radioactive nuclear beams make it possible to investigate isotopes with large neutron or proton excess and nuclei with extreme mass numbers. A wealth of new phenomena in exotic nuclei with extreme isospin values have been observed or predicted, such as the formation of neutron skins and halo structures, changes of shell effects and the appearance of new magic numbers, new collective modes, proton radioactivity, and the discovery of new super-heavy elements with relatively long life times. We discuss recent applications to describe such phenomena in the framework of covariant density functional theory.