

## The AMEDEV nuclear structure database

S. Hilaire<sup>1</sup>, M.Girod<sup>1</sup>

<sup>1</sup> Service de Physique Nuclaire, CEA/DAM Ile-de-France, BP 12, 91680 Bruyres-le-Châtel,  
FRANCE.

The increasing need for nuclear data far from the valley of stability requires information on nuclei which cannot be accessed experimentally or for which almost no experimental data is known. Consequently, the use of microscopic approaches to predict properties of such poorly known nuclei is necessary as a first step to improve our understanding of nuclear reaction on exotic nuclei.

Within this context, large scale axial mean field calculations from proton to neutron drip-lines have been performed using the Hartree-Fock-Bogoliubov method based on the D1S Gogny nucleon-nucleon effective interaction. Nearly 7000 nuclei have been studied under the axial symmetry hypothesis and several properties are now available for the nuclear scientific community on an Internet web site for every individual nucleus.

Some global properties will be presented, such as the positions of the drip-lines, the nuclide ground state deformations and binding energies as well as regions where possible super or hyper-deformation might be encountered. The organisation of the online database will also be described as well as its future extensions.