### Periodic Report 2: TransNational Activities at GANIL TNA01 – WP14

# **Description of the Selection Panel**

The role of the program advisory committee (PAC) at GANIL and a list of its members were presented in the previous reporting period. This was not modified in the present reporting period. The selection panel members are provided in Annex 1.

A program advisory committee (PAC) meeting was held during the present reporting period on October 25<sup>th</sup> and 26<sup>th</sup>, 2013 at GANIL. During this meeting, 14 experiments were proposed that requested a total of 126 days (379 UT's) of beam time. Of the proposals submitted, 10 experiments were approved for a total of 80 days (239 UT's). Of these, 4 experiments qualified for support and all of them were approved for funding according the EC regulation on TNA.

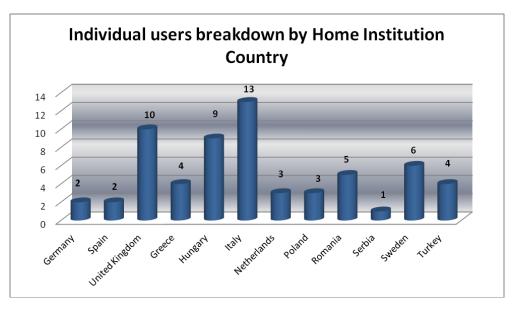
For interdisciplinary research, a PAC meeting was held on April 9<sup>th</sup>, 2013 in Paris.

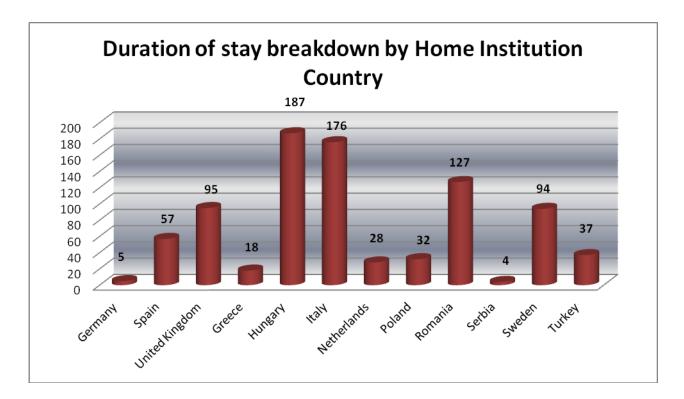
## **Transnational Access activity**

During the reporting period PR2 (March 1, 2012 – August 31, 2013)

- 1058.48 experimental hours were delivered
- 92 stays were financed
- 62 different individual users visited the facility
- 860 days were spent at GANIL by these users
- 26% were women
- 37% were new users

Career breakdown of the 62 individual users supported: 32 are experienced researchers, 10 postdoctoral fellows, 18 graduate students, and 2 undergraduate students.





The scientific areas of the experiments performed at GANIL are: nuclear structure and spectroscopy of exotic nuclei; fusion, fission of heavy nuclei; dense and hot nuclei; nuclear astrophysics; and tests of fundamental interactions. The main goals are to understand the structure of nuclei, their shape and shell evolutions from stable to drip line nuclei, to measure the properties of nuclear matter and to evaluate the role of nuclear structure in astrophysical environments. Together with other European and international collaborations, GANIL is engaged in all these fields of research, many of which are major scientific motivations justifying the SPIRAL2 project.

### Scientific output of the users at the facilities

Owing the complex nature of the experiments performed at GANIL, publications and scientific output for the experiments performed at GANIL during the reporting period are incomplete (see Annex 4 of the database). The majority of experiments in this field often require between 1 and 3 years to fully complete all of the analyses of the data and publish the results. In the attachment to the ENSAR report, a list of 22 peer-reviewed publications based on experiments supported by the previous TNA (FP6-EURONS) at GANIL is provided.

In the present reporting period of 18 months the facility was operated for only 5 months between March 2012 to July 2012 and again for 1 month July 2013. During this period there were two major highlights obtained from user-supported projects:

- A study of nuclear shapes and deformations in neutron-rich Os nuclei
- Mirror energy differences and isospin symmetry breaking in <sup>23</sup>Na and <sup>23</sup>Mg

Further details can be found in Annex 2.

#### **User meetings**

A users meeting was held at "Colloque GANIL" in Port-en-Bessin, Normandy (France) between September 23 and 27<sup>th</sup> 2013. The purpose of this conference was to review and discuss research performed at GANIL and related activities carried out at similar facilities around the world. Traditionally, this meeting covers the range of physics topics that are studied at GANIL including:

- Nuclear structure
- Reaction mechanism
- Nuclear astrophysics
- Weak interaction
- Interdisciplinary research

The main theme of this year's Colloque was "Links between current scientific activities and SPIRAL2". A total of 148 participants attended the meeting.

### <u>Annexes</u>

- Annex 1 Composition of the Users Selection Panel See "Selection Panel" in MS Access Database
- Annex 2 List of User-Projects See "List of User-Projects" in MS Access Database
- Annex 3 List of Users See "List of Users" in MS Access Database
- Annex 4 List of Publications (from work carried out under the TNA activity). See "List of publications " in MS Access Database and List of EURONS publications in attachment