



Report on TransNational Activities at GANIL TNA01 – WP14

Description of the publicity concerning the new opportunities for access

A dedicated Users Guide on the GANIL Web-site exists to publicise the opportunities for access: <http://pro.ganil-spiral2.eu/users-guide>.

This Web-site details the facilities available, the laboratory infrastructure and services, the selection process and a call for proposals.

In a subsidiary Web-site, <http://pro.ganil-spiral2.eu/users-guide/ensar-tna>, the application for financial assistance for Transnational Access is described, i.e.:

- Financial support available
- Who can apply
- How to apply
- The application form

Description of the selection procedure

The selection of users by the PAC (Programme Advisory Committee) is made only on the scientific merit of the proposals submitted. The proposals are reviewed independently of their country of origin. Experiments are evaluated and awarded a number of 8-hour shifts of beam time, according to the number requested and the number deemed suitable by the PAC. Once the list of approved experiments has been determined by the PAC, the external (i.e. non-GANIL) members of the PAC are asked to choose, from the approved experiments, those which are entitled to financial support through the TA activity.

During the reporting period, one PAC for nuclear physics was held at GANIL, on 3-4 April 2014. 32 proposals were submitted of which 19 were eligible to financial support, but only 13 proposals were accepted of which 5 were eligible.

For interdisciplinary research, a PAC meeting was held in July 2014

In Annex 1, there is the list of the Selection Panel members for the reporting period as well as the number of eligible user-projects submitted to the panel during the reporting period and the number of the selected ones.

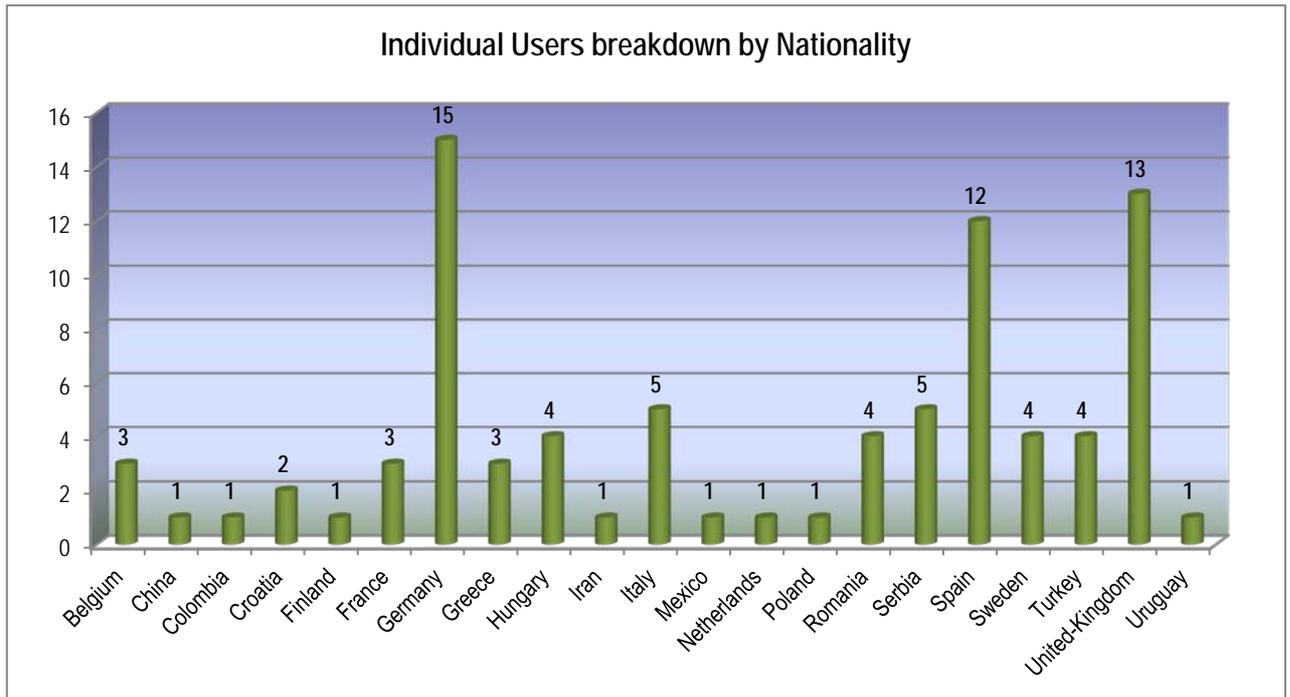
Transnational Access activity

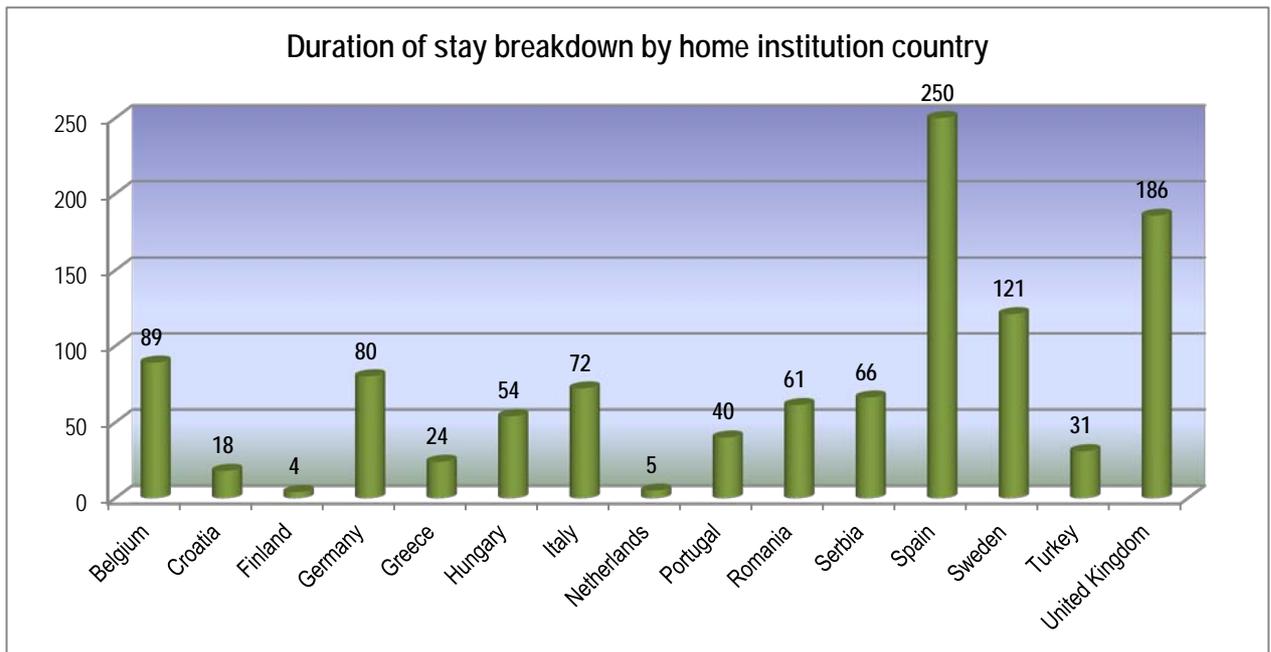
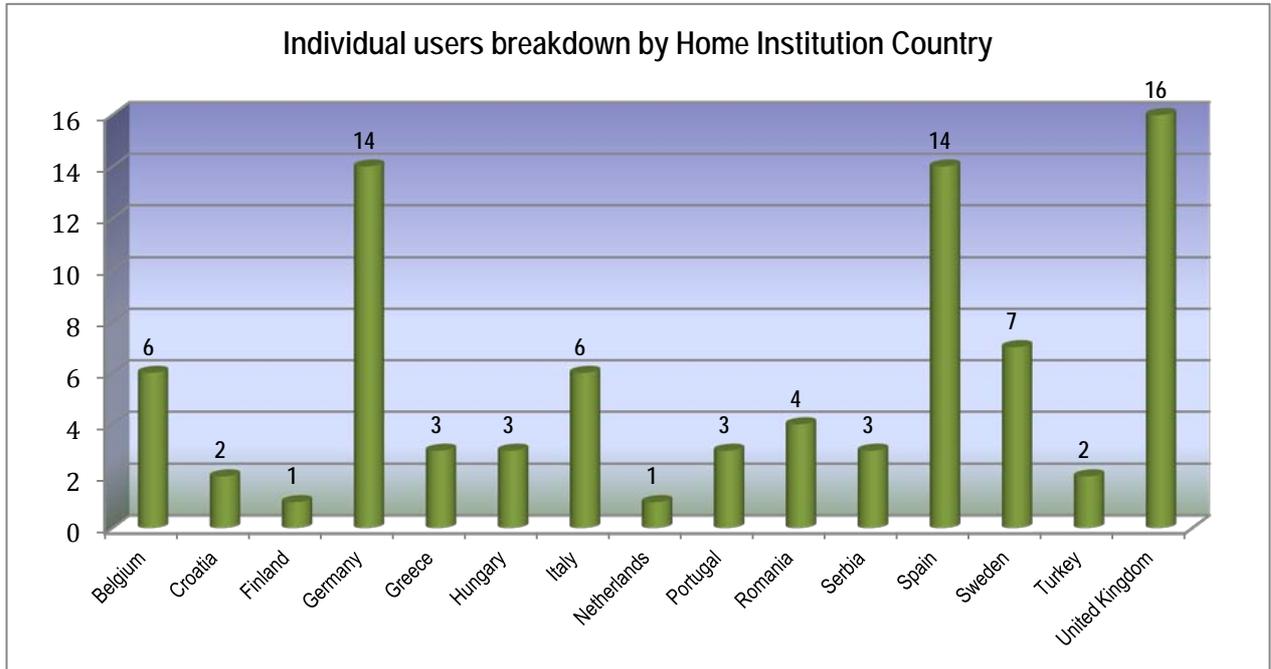
During the reporting period

- 2 079.20 experimental hours were delivered
- 120 stays were financed
- 85 different individual users have visited the facility
- They spent 1101 person-days at GANIL
- 25% were women
- There were 37 experienced researchers, 13 Post-doc researchers, 33 Post-graduate, 1 Undergraduate and 1 technician
- 59% were new users



The scientific areas of the experiments performed at GANIL are as follows: nuclear structure and spectroscopy of exotic nuclei; fusion, fission of heavy nuclei; and test of AGATA tracking array - in preparation of the forthcoming 4 year experimental campaign at GANIL. Among others, the goals are to understand the structure of the nuclei far from the stability line, their shapes and shell evolutions down to the drip lines. GANIL - together with European and/or international collaborations and several French partners - is engaged in all these fields of research, which are also the major scientific motivations justifying the SPIRAL2 project.





Scientific output of the users at the facilities

Obviously not many publications have yet been published from the complex experiments performed at GANIL during the reporting period (see Annex 4 of the Data Base). Please find in attachment to the ENSAR report the list of peer-reviewed publications based on experiments supported by the previous TNA (FP6-EURONS) at GANIL and not yet reported to EC. They are 22 in total.



During the reporting period, some unique results have been obtained and are being fully analysed. We mention below some highlights from the user-projects supported under the grant agreement.

- Evolution of nuclear structure far from stability studied in the reaction $^{16}\text{C}(d,p)^{17}\text{C}$,
- Study of the p - n $T=0$ and $T=1$ pairing in the reactions $^{48}\text{Cr}(p,^3\text{He})\cdot(d,\alpha)^{56}\text{Ni}(p,^3\text{He})\cdot(d,\alpha)$,
- Measurement of the fission time of $^{238}\text{U}+^{76}\text{Ge} \Rightarrow Z=126$ nucleus using X_k fluorescence of atoms,
- Study of the spin-aligned neutron-proton paired phase in ^{96}Cd using EXOGAM+Nwall+Diamant detectors,
- Alpha clustering phenomena in the ^{40}Ca , ^{44}Ca , ^{48}Ca isotopes.

Several important instrumentation tests were also accomplished:

- test of AGATA tracking array and VAMOS spectrometer in preparation of the forthcoming 4-year experimental campaign at GANIL,
- test of the production and focal-plane detector system for studies of SHE and heavy nuclei at LISE spectrometer, and
- test of detection of fission events in inverse kinematics with ^{238}U beam using MAYA active-target detector.

The information on the results of previous experiments realised with the financial support of TNA can be found in Annexe 2.

User meetings

The GANIL/SPIRAL2 Week 2014 was held in Caen during 4 days, in October (350 participants). The main goal of the meeting was to present and discuss the current status of the GANIL/SPIRAL2 projects in front of a large community of scientists and engineers. The major part of the scientific programme of the GANIL/SPIRAL2 Week is dedicated to presentations of the main advances in physics, instrumentation for the GANIL/SPIRAL2 and construction of the SPIRAL2 accelerator and experimental halls.

Furthermore, in order to improve feedback between the users and GANIL staff, there is a short meeting (~30 min) every week during the running period of the facility, to discuss problems, which might appear during the previous, current and next week. Users with experiments during these weeks do participate or send a representative.

Annexes

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



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Annex 3 – List of Users

See “List of Users” in MS Access Database

Annex 4 – List of Publications (from work carried out under the Transnational Access activity).

See “List of publications” in attachment of the periodic report