GANIL NEWSLETTER

JANUARY 2026

I wish you an excellent year 2026, full of stimulating projects and success, both professionally and personally. It is with enthusiasm and conviction that I took over as Director of GANIL on November 1st, 2025 — a laboratory to which I have devoted a large part of my career and for which I have a deep ambition. GANIL is now entering a decisive phase in its development. In 2026, we will see the installation of the first equipment in the DESIR Hall, which has recently been completed. The first sections of the new NEWGAIN injector will be installed in the SPIRAL2 building, while the first renovation actions for the cyclotrons will begin in the second half of the year. Finally, the optical commissioning of S^3 is expected to start in the last quarter. These major milestones reflect renewed momentum and open up promising prospects for further strengthening the attractiveness and visibility of our facility.

→ Discover the digital greeting card.

Hervé Savajols

HEADLINES

DESIR moves into its «new home»

On October 31, 2025, the DESIR building officially became part of INB No. 113 and was permanently incorporated into the GANIL's assets.

The main building, soon accessible to GANIL staff, will house the first equipment needed for its technical commissioning at the beginning of next year.

UPCOMING MEETINGS AND EVENTS

February 2sd-6th
Euro-LABS
https://indico.in2p3.fr/event/37562/

May 17th-20th
IPAC26
https://www.ipac26.org/

June 15th-17th
IC3DDose
https://indico.in2p3.fr/event/34811/

Sept 20th-25th
Colloque GANIL
https://indico.in2p3.fr/event/37719/

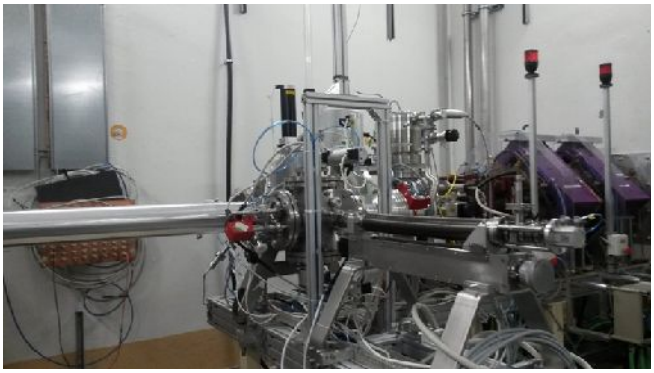
SCIENTIFIC HIGHLIGHTS

GANIL hosted EuNPC2025

From 22 to 26 September 2025, GANIL organised the sixth edition of the European Nuclear Physics Conference (EuNPC 2025) in Caen, in collaboration with the Nuclear Physics Division of the European Physical Society (NPD-EPS), LPC Caen, IJCLab Orsay and IRFU Saclay. This major gathering of the European scientific community brought together several hundred researchers to discuss recent advances in nuclear physics and its applications.

- Read the article

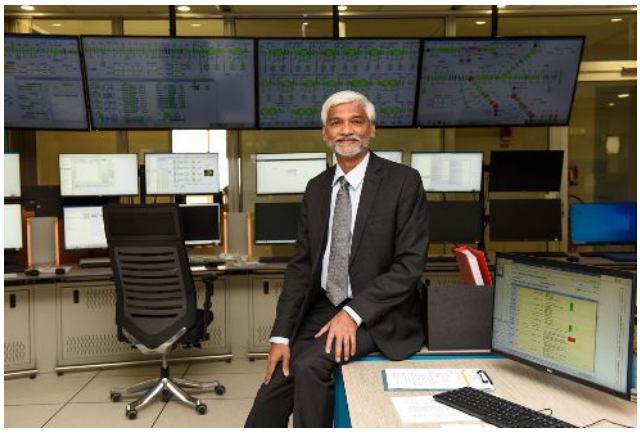
Measurements at SPIRAL2 for Nuclear Medicine



Thanks to SPIRAL2, researchers were able to obtain precise data on the production of astatine-211, a promising isotope for cancer treatment, as well as on astatine-210, its dangerous and previously little-known neighbor. This experiment demonstrates that the SPIRAL2 facility, originally built to address fundamental nuclear physics questions, can become a key tool for studying and producing therapeutic radioisotopes, combining intensity, stability, and energy precision. Astatine-211 may be just the first in a series of radionuclides produced and characterized under ideal conditions.

- Read the article

Navin Alahari has been named as 2025 American Physical Society (APS) Fellow



He joins the GANILiens Marek Ploszajczak (2008) and Pieter Van Isacker (2009) who the received the same honour.

The APS citation read as follows:

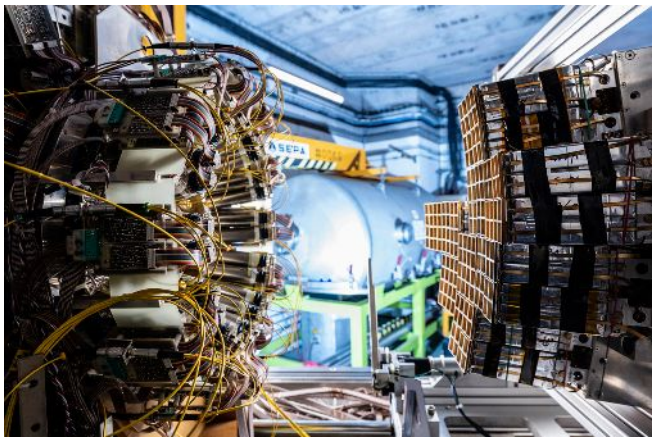
For advancing nuclear science by developing new techniques that combine tools of nuclear reactions and nuclear structure to characterize the properties of rare isotopes as a function of isospin and tunnelling at the femtometer scale.

- Read The article

A thesis carried out at GANIL honoured by the Royal Spanish Society of Physics

The thesis «Complete spectroscopy of 16C and 20O on solid and active targets by transfer reactions», defended by Juan Lois Fuentes at the University of Santiago de Compostela (USC) in July 2023, was recognized by the Specialized Group in Nuclear Physics of the Royal Spanish Society of Physics as the best Spanish thesis in the category «Experimental Nuclear Physics». His research was supervised by Beatriz Fernández Domínguez (USC) and by Thomas Roger (GANIL).

Exploring the behavior of nuclear matter through heavy-ion collisions



A new constraint on the symmetry energy term of the nuclear Equation of State has been recently published by the INDRA-FAZIA collaboration. The result has been obtained by studying the effect of isospin diffusion in 58,64Ni+64,58Ni collisions at 32MeV/nucleon, comparing the experimental measurements with theoretical predictions assuming different nuclear functionals from both ab-initio and phenomenological approaches. The resulting symmetry energy constraint can be directly used for the inference of the neutron star Equation of State.

- Read the article

Scientific annual report publication

This report is a snapshot of GANIL's activities.

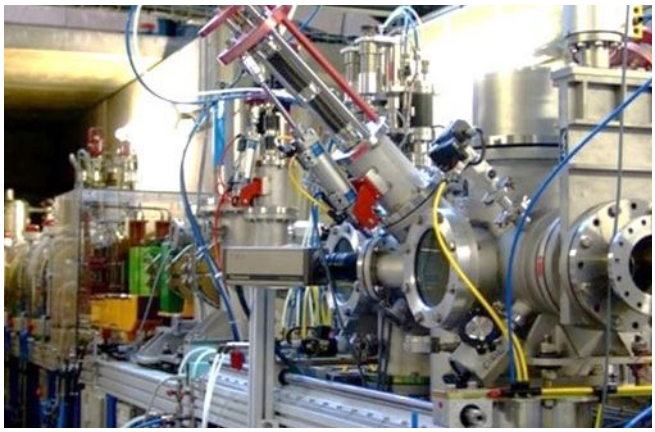
It is also a signature, an open window on the complex and intense activities taking place at the laboratory, in pursuit of a rich scientific program, gathered into different thematics in this report. GANIL scientific program is fostered by continuous technical support and development to provide users with state-of-the-art ion beams and instrumentation.

- Read the scientific annual report

ABOUT THE MACHINE

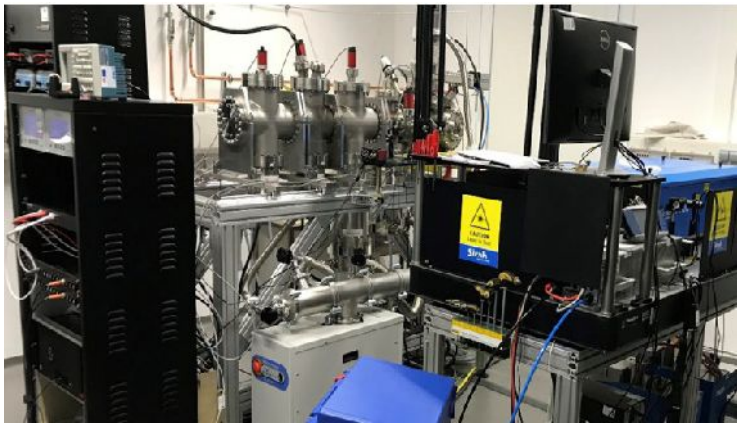
First experiment at Ø.1 MeV/u sur IRRSUD

Two feasibility studies carried out in 2Ø24 had validated the extension of the range of energies available on IRRSUD, thus lowering the limit from Ø.3 MeV/u to Ø.1 MeV/u. Early July 2Ø25, a 2ØNe2+ beam at Ø.1 MeV/u was accelerated on CØ1 and delivered for the first experiment in this new energy range, conducted by CIMAP and focusing on the behavior of organic materials of nanometric thickness under irradiation.



LRC Project: A new laser spectroscopy technique at GANIL

LRC stands for 'laser resonance chromatography', a spectroscopy technique that was recently developed under the EU Horizon 2Ø2Ø framework to study the superheavy elements. Successful proof-of-principle experiments point to a promising future for using this technique to study the most exotic radionuclides at S^3 and DESIR, which have so far eluded optical spectroscopy.



Refurbishment of the extraction turrets

The renovation work on the 16 air extraction turrets of the machine buildings and experimental areas is now underway. A long-reach crane has been installed to carry out the lifting operations. This project aims to restore the full ventilation capacity, which had decreased over time due to equipment ageing. A control system with temperature sensors will also be implemented to optimize overall performance.

Find all the issues of the newsletter on the GANIL website

Contact : communication@ganil.fr