

## CALL FOR PROPOSALS OF EXPERIMENTS WITH THE 3.5 MV ACCELERATOR OF THE BELLOTTI ION BEAM FACILITY OF LNGS

Researchers interested in performing experiments with the 3.5 MV Accelerator of the "BELLOTTI Ion Beam Facility" of LNGS in 2025 are invited to submit a written proposal to the Program Advisory Committee (PAC).

The deadline for submission of written proposals is **August 18, 2024**. The proposal shall follow the Template provided in Attachment 1. Proposals must be submitted as PDF files to the e-mail address: [Bellotti-IBF-PAC@lngs.infn.it](mailto:bellotti-ibf-pac@lngs.infn.it). No other means of submission will be accepted.

The proposals will be sent to the PAC for evaluation. Applicants may be asked to give an oral presentation of their proposal.

For any information concerning the beams available at the Bellotti IBF, please visit the LNGS website at: <https://l.infn.it/bellotti>. For information on the experimental facilities, the beamlines, and the experimental halls, please contact the Head of the Accelerator Service, Dr. Matthias Junker, at [junker@lngs.infn.it](mailto:junker@lngs.infn.it).

The inclusion of Bellotti IBF is pending final approval by the European Commission. Prospective users are already now asked to submit proposals for the 17 August 2024 ChETEC-INFRA collection date. These proposals will be evaluated by two boards in parallel: the ChETEC-INFRA User Selection Panel, and the PAC of the Bellotti IBF. If both boards approve the proposal, and the EU approves the inclusion of Bellotti in ChETEC-INFRA, beam time and travel support will be provided.

Prof. Ezio Previtali  
Director of Laboratori Nazionali  
del Gran Sasso



## **Bellotti Ion Beam Facility, LNGS Application for Experimental Time**

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### **Detailed Proposal**

[Please feel free to repeat information from the Science Part / Project Description as necessary.]

Title of Experiment

[...]

Name of the PI, participants, and institutions

[...]

Short abstract and scientific motivations (max. 3 pages)

[...]

Objectives of the Experiment (max.

[...]

Expected Outcome

[...]

Experimental Setup

[...]

Requested Beam Type and Current

[...]

List of Target Materials to be Used

[...]

Possible Safety Considerations

[e.g. hazardous materials]

Justification of the requested beam time length (e.g. from the estimated yields)

[Please provide a justified overview of the required beam parameters and estimated times needed for each beam parameter set.]

Justification of the need for low cosmic ray background (e.g. from the estimated yields)

[Please provide a justified overview of how your experiments benefit from the low cosmic ray background at the Bellotti IBF.]

Estimate of the neutron flux induced by the proposed experiment (e.g. from the estimated yields)

[Please provide a justified overview of how your experiments benefit from the low cosmic ray background at the Bellotti IBF.]

Results of Previous Access Times at Bellotti IBF (in case of previous projects)

[...]

Relation to Other Projects, Student Theses, etc.

[If this proposal is related to a thesis project or other external projects, please note this here. In particular, if this affects the potential timeline for conducting the project.]

Support for Travel and Accommodation

[If financial support for travel and accommodation is requested, please outline the planned travel (number of scientists, duration), and the total amount of support requested.]

Other information, special needs, remarks, etc.

[...]

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### Scheduling information

Preferred period for access time

[preferred or excluded periods for the proposers]

Requested beamtime

[in hours, total]

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### Check List

Please double-check that your experimental plan includes the following information:

- Aim of the project in short
- Ion beam species, energies, intensities
- Total duration of the project (access time)
- Equipment that you bring to the facility
- Preferred time slot for scheduling this access
- Required instruments of the facility
- Required equipment to be provided by the facility