



EURO-LABS Basic Training School 2023 – BTS23

Sep. 13 - 23, 2023 at IFIN-HH Bucharest- Magurele, Romania

First circular

EURO-LABS is a network of 33 research and academic institutions from 18 countries (25 beneficiaries and 8 associated partners) from European and non-EU countries, involving 47 Research Infrastructures (RI) in the Nuclear Physics, Accelerators and Detectors for high energy physics pillars. The project brings together, for the first time, the three research communities of nuclear physics, accelerator, and detector technologies for high energy physics, in a pioneering super-community of sub-atomic scientists. Within it, EURO-LABS ensures diversity and actively supports researchers and research groups to use its RIs.

Its main goal is to provide effective access to a network of 47 Research Infrastructures (including 3 RIs with Virtual Access) to conduct curiosity-based research, addressing fundamental questions and technological challenges and advancing projects with broad societal impact, fostering knowledge sharing between scientific fields and enhancing Europe's potential for successfully facing future challenges.

To fulfill this goal, the community recognizes that it needs to pay attention to improve the efficiency of use of RIs and to increase its human and institutional basis. It was decided, therefore, to organize a system of training activities, at various levels, starting with annual Basic Training schools and Advanced Training schools, organized by members of the project.

Here we announce the **Basic training school of 2023 BTS23, Sept. 13-23, 2023**, to be organized at **IFIN-HH, Bucharest-Magurele, Romania**. It will involve hands-on activities around the tandem accelerator complex of IFIN-HH:

1. Target preparation laboratory.
2. Vacuum technology for accelerators and special detectors.
3. Use of some of the most widely employed gamma-ray and particle detectors: HPGe, LaBr₃(Ce) in ROSPHERE, neutron detectors, scintillators, simple and multistrip Si detectors.
4. DAQs; types of accelerator experiments.
5. Manning experiments at the 9 MV and 3 MV tandems (3+3 days around the clock)
6. Calibration of the accelerator and of detectors used.
7. De-activation measurements in an ultra-low background laboratory of IFIN-HH located in a salt mine 125 km North of Magurele.
8. Dedicated detectors and electronics for large hadron physics experiments.
9. Guided visits to other major facilities of IFIN-HH: the RoAMS tandetron, HPD, IRASM, old Reactor, ELI-NP, etc.

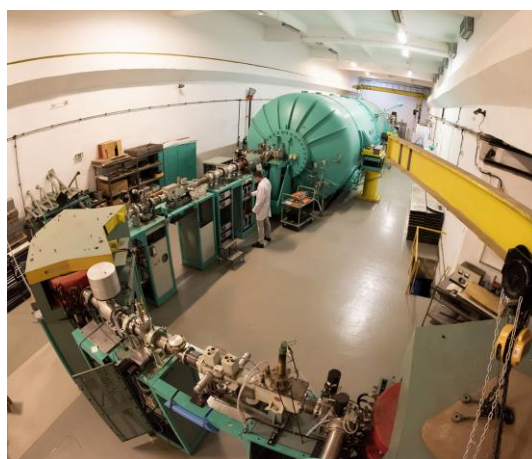
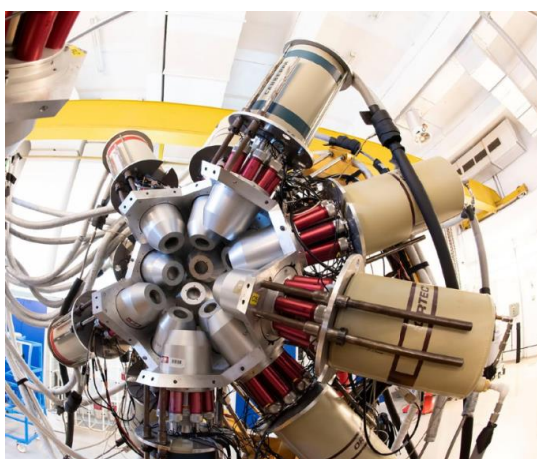
Beamtime at the 3 MV and 9 MV tandems was reserved through PAC applications for use during school. Up to 15-20 students (trainees) will be selected for a period of 12 days.

Trainees' participation will be financed by EURO-LABS: travel with economy class within Europe, accommodation, and subsistence support. Trainers will be local and international.

Organizers:

Razvan Lica (chair), Mihai Straticiuc, Mihai Constantin, Dana State, Livius Trache et al.

To apply register online at <https://indico.nipne.ro/event/246/> or write to bts23@nipne.ro, including a letter of recommendation from your advisor.



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