



**INTERNATIONAL  
WORKSHOP**  
on Production of Intense Beams  
and Highly Charged Ions

**7 – 9 April 2025**  
**Acitrezza (Catania), Italy**

**SCIENTIFIC PROGRAMME**

Fundamental processes  
Production of highly charged ion beams  
Production of high intensity ion beams  
Microwave coupling for future ECRIS  
Beam formation and extraction  
Magnetic system for future ECRIS  
Controls and diagnostics  
Codes and simulations  
Transport of intense beams  
Emerging technologies

**INTERNATIONAL ADVISORY COMMITTEE**

Luigi Celona	Chair, INFN-LNS, Italy
Janilee Benitez	LBL, USA
Ralph Hollinger	GSI, Germany
Osamu Kamigaito	RIKEN, Japan
Oliver Kester	TRIUMF, Canada
Atsushi Kitagawa	NIRS-QST, Japan
Hannu Koivisto	JYFL, Finland
Guillaume Machicoane	NSCL-MSU, USA
Olli Tarvainen	STFC UKRI, UK
Thomas Thuiller	LPSC, France
Richard C. Vondrasek	ANL, USA
Hong-Wei Zhao	IMP, China



**Industrial Exhibition**

***[agenda.infn.it/e/pibhi2025](http://agenda.infn.it/e/pibhi2025)***



### INTERNATIONAL ORGANIZING COMMITTEE

Luigi Celona	(Chair, INFN-LNS, Italy)
Janilee Benitez	(Lawrence Berkeley Lab, USA)
Ralph Hollinger	(GSI, Germany)
Osamu Kamigaito	(RIKEN, Japan)
Oliver Kester	(TRIUMF, Canada)
Atsushi Kitagawa	(NIRS-QST, Japan)
Hannu Koivisto	(JYFL, Finland)
Guillaume Machicoane	(NSCL-MSU, USA)
Olli Tarvainen	(STFC UKRI, UK)
Thomas Thuiller	(LPSC, France)
Richard C. Vondrasek	(ANL, USA)
Hong-Wei Zhao	(IMP, China)

### LOCAL ORGANIZING COMMITTEE

Santo Gammino	(INFN-LNS)
Gaetano Agnello	(INFN-LNS)
Antonio Caruso	(INFN-LNS)
Giuseppe Castro	(INFN-LNS)
Loreto Di Donato	(Univ. of Catania)
Ornella Leonardi	(INFN-LNS)
Santi Pavone	(Univ. of Catania)
Virginia Potenza	(INFN-LNS)
Gino Sorbello	(Univ. of Catania and INFN-LNS)
Giuseppe Torrisi	(INFN-LNS)



## International Workshop on Production of Intense Beams and Highly Charged Ions

7-9 April 2025, Acitrezza (Catania), ITALY

### **Conference presentation**

The International Workshop on Production of Intense Beams and Highly Charged Ions (PIBHI2025) will be held in Acitrezza, a small fishing village overlooking the Ionian Sea at 10 km from Catania placed at the foot of the Etna Volcano – the highest and most active of Europe.

The workshop will take place in the halls of the [Grand Hotel Faraglioni](#), with several archaeological and cultural attractions situated in the nearby.

The [Laboratori Nazionali del Sud](#) of [Istituto Nazionale di Fisica Nucleare](#) (INFN-LNS) is in charge of the organization of this event, aimed to tackle specific issues of Ion Sources Science & Technology able to address the solutions to the request of high intensity beams and to reinforce the common ground and synergies among the different actors in the field.

About 100 experts in the field of ion sources, particle accelerators, ion implantation, beam optics, fusion research, etc. are expected from all over the world.

### **Scientific programme**

The PIBHI 2025 scientific programme will cover themes of ion source science and technology that are relevant to the production of beams for scientific research and for applications.

Hereinafter the main topics are reported:

- Fundamental processes;
- Production of highly charged ion beams;
- Production of high intensity ion beams;
- Microwave coupling for future ECRIS;
- Beam formation and extraction
- Magnetic system for future ECRIS;
- Controls and diagnostics;
- Codes and simulations;
- Transport of intense beams;
- Emerging technologies;

This workshop aims to gather scientists involved in those tasks, to compare different experiences, aiming to solve the problem of the stable and reproducible production of such intense beams as well as of the extraction and transport of space-charge-dominated beams.

More information can be found in the [INDICO page of the workshop](#).

Final agenda with the indication of chairpersons will be issued by the end of February.

## Conference venue

The peculiar landscape of Aci Trezza with its Faraglioni and the proximity to the majestic Mount Etna has nurtured legends and myths over the centuries. The Greek poet Homer, in the IX book of the Odyssey, sets in the Sicilian village the unfortunate encounter between Odysseus and Polyphemus.

Another legend that has reached us is the one where the monstrosity of Polyphemus is linked with the Sicilian village, is the myth of Acis and Galatea. Right on the strip of land between Mount Etna and the Ionian Sea lived a beautiful nymph named Galatea, daughter of Neptune.



The marvelous creature fell in love with the shepherd Acis, and despite being from different worlds, they fell in love. Polyphemus, who lived in those areas, had also fallen in love with Galatea, and once he learned of their love, blinded by jealousy, uprooted trees and hurled a gigantic rock at poor Acis, smashing his body into pieces. It is said that the nymph shed all her tears, to the point of moving the Gods to pity. So they transformed Acis into a river and the nymph into sea foam, so they could embrace for eternity.

Greek mythology also inspired the name of the Cyclopean Isles, mighty basalt sea stacks emerging from the sea in its namesake marine protected area. At sunset, their silhouette against the fiery sky makes for a picture-perfect view.

Don't miss the Baroque-style Church of San Giovanni Battista and the Norman Castle, standing tall above the village. After climbing the steep steps to the castle, you can replenish your energy with a "nivi cunzata", the typical Sicilian granita, or the fresh fish available at the fish market.



International Workshop on Production of Intense  
Beams and Highly Charged Ions

*7-9 April 2025, Acitrezza (Catania), ITALY*

### ***Sponsorship opportunities***

A list of the possible options for advertising your company by supporting the event as a sponsor are reported in the following. The name of the sponsor companies will appear both on Conference Program and it on the web page of the Conference. The list is non-exhaustive. Please feel free to contact us to suggest any kind of sponsorship you may wish or which seems to be more appropriate to your needs and budget.

#### ***Support of the Conference Outing/Banquet (09/04): 1.500 €***

The sponsors can get an important visibility by supporting the Conference Outing and Banquet on Wednesday 09 April. Only one sponsor may support such event. Your logo will appear on the tables together with the banquet menu. All the participants are invited to attend this event.

#### ***Support of the Conference Bag: 1.000 €***

A valuable mode to get visibility for your company is to support the conference bag: a maximum of two logos will appear on the bag. With this kind of advertisement your company will get visibility not only for all the conference duration, but even later.

#### ***Support of the Welcome Party (06/04): 700 €***

The sponsors can get also an important visibility by supporting the welcome party of the conference on Sunday 6 April. Only one sponsor may support such event. All the participants are invited to attend this event.

#### ***Support of one coffee break: 400 €***

Another way to get visibility when the participants are gathered together is to support one coffee break. Your logo will appear on the tables. Only one sponsor for coffee break will be admitted.



International Workshop on Production of Intense  
Beams and Highly Charged Ions

*7-9 April 2025, Acitrezza (Catania), ITALY*

***Badge cord, Notepad, Pen or USB memory: 250 €***

This simple and efficacy advertisement consist to provide the material of the conference: BadgeCords, Notepads, Pens, USB memories or whatever to all participants. The sponsors have to provide 100 parts of the material/s chosen one week before the opening date of the conference.

***Posters: 250 €***

This further possibility to advertise your company consists in using a poster or other material to be displayed in the venue corridors, for all the duration of the whole conference.

***Payment & Contacts***

To receive further information, apply for participation or receive payment modalities, please contact the workshop chairman or [pibhi2025@lns.infn.it](mailto:pibhi2025@lns.infn.it) with **Exhibitor PIBHI2025** in the subject.