

XV International Symposium on Nuclei in the Cosmos

Laboratori Nazionali del Gran Sasso, L'Aquila - Assergi, Italy
June 24 - 29, 2018
http://nic2018.lngs.infn.it
nic2018@lngs.infn.it

Second Circular

Venue

The conference will be held at Laboratori Nazionali del Gran Sasso of INFN, Assergi, L'Aquila. The Gran Sasso National Laboratory (LNGS) is one of the four INFN National laboratories. It hosts experiments from the fields of Astroparticle Physics, Nuclear Astrophysics and other disciplines which require a low background environment. In particular the LUNA facility represents the first underground accelerator worldwide.

Scientific Program

The conference is the fifteenth in the Nuclei in the Cosmos (NIC) biennial series. The focus of the NIC XV conference will be the cross-fertilization of nuclear physics research with astrophysical topics. The conference aims to address the current major achievements in nuclear physics, astrophysics, astronomy, cosmo-chemistry and neutrino physics that provide the necessary framework for any microscopic understanding of astrophysical processes, as well as for discussing the future directions and perspectives in the various fields of Nuclear Astrophysics research.

The scientific programme will open on Monday June 25th at 9:30 and will close on Friday June 29th at noon. All invited talks will be 30 minutes long including 5 minutes of discussion. All contributed talks will be 15 minutes long including 3 minutes of discussion. A data computer and projector will be available for presentations. The presentation must be handed to the organizers on USB pen to be copied to the laptop of the Lecture Hall well before the session starts. Speakers should check the computer presentations on the conference laptop before their session. The allowed poster size is A0. The posters should be displayed for the whole duration of the conference. The dedicated poster session is on Tuesday June 26th from 18:30 until 20:30.

The accepted abstracts and the detailed program of the conference will be posted on website soon.



Topics

Cosmology and big bang nucleosynthesis

Stellar contributions to the chemical evolution, hydrostatic and explosive nucleosynthesis

Neutrino and nucleus interaction in the cosmos

Physics of nuclei far from stability

Synthesis of heavy elements

Direct observation of nucleosynthesis in stars

Study of extra terrestrial materials

Nucleosynthesis in extreme environments

Techniques, tools and facilities for nuclear astrophysics

Nuclear data for astrophysical applications

Special topic: particle astrophysics and rare events in cosmos

Invited speakers

Please find below our confirmed speakers.

- C. Abia (Granada University, Spain)
- M. Branchesi (Gran Sasso Science Institute, Italy)
- A. Chieffi (INAF IAPS, Italy)
- B. Côté (Konkoly Observatory, Hungary)
- J. deBoer (University of Notre Dame, USA)
- I. Dillmann (TRIUMF, Canada)
- P. Hoeflich (Florida State University, USA)
- W. R. Hix (Oak Ridge National Laboratory, USA)
- C. Iliadis (Triangle Universities Nuclear Laboratory, USA)
- S. Kubono (RIKEN Nishina Center, Japan)
- C. Lederer-Woods (University of Edinburgh, UK)
- M. Laubenstein (INFN LNGS, Italy)
- K. Lodders (Washington University, USA)
- C. Massimi (University of Bologna & INFN, Italy)
- B. D. Metzger (Columbia University, USA)
- F. Petricca (MPI Munich, Germany)
- R. G. Pizzone (INFN LNS, Italy)
- N. Prantzos (CNRS, France)
- P. Prati (University of Genova & INFN, Italy)
- S. Randich (INAF OAA, Italy)
- S. Rosswog (Stockholm University, Sweden)
- C. Ruiz (TRIUMF, Canada)



M. Schönbächler (ETHZ, Switzerland)

F. Strieder (SD School of Mines and Technology, USA)

Y. Zhang (Institute of Modern Physics, China)

The hosting city

LNGS is located in the vicinity of the village of Assergi inside the Parco Nazionale del Gran Sasso and Monti della Laga and close to the town of L'Aquila, the capital of the Abruzzo region. The history of region is a fascinating blend of tradition and legends. L'Aquila was founded in mid-13th century. The territory hosts a unique natural environment with rare species of flora and fauna. It is also rich in history with architectural (romanesque and gothic churches) and archaeological sites of the Roman times.

Important dates

Registration for conference: until May 25, 2018

Regular fee: until May 25, 2018

Please check the relevant information on "Registration: Conference fee" in NIC XV website.

The fee will include:

- transportation from/to the Rome airports
- shuttle service from/to the hotels
- guided tour of underground laboratory
- abstract booklet
- welcome party and lunches
- excursion
- social dinner

Supporting Institutions and Sponsors

The conference is supported financially by a number national and international organisations: INFN, Universit della Campania, GSSI, JINA and EPS. In addition, we have also received sponsorship from the IUPAP. As such, NICXV will be conducted in accordance with IUPAP principles. In particular, no bona fide scientist will be excluded from participation on the grounds of national origin, nationality, or political considerations unrelated to science. NIC XV is supported also by High Voltage Engineering Europe B.V (http://www.highvolteng.com/).



Proceedings

Both oral contributions and poster will be peer reviewed by a dedicated committee of referees. The proceedings of the conference will be published in Springer Proceedings in Physics. The editors will assure that the papers accepted will live up to high scientific standards. The editors will provide guidelines for manuscript preparation and upload of the final manuscripts for production. All articles must be submitted in electronic format using the specific LaTeX style files available on website http://nic2018.lngs.infn.it.

The deadline for proceedings contributions is August 30, 2018.

Accommodation

A list of affiliated hotels near the Lab with contracted rates is available on

"Information: Accommodation" section of conference website. Hotel reservation should be made personally by each participant, directly contacting the hotels. No booking service provider (e.g. booking.com) should be used in order to be included in the list of conference attendees and get the contracted rates. Reservation code for the workshop participants is "NIC 2018" and must be mentioned when booking the room. Rooms will be available until the indicated deadline on "first come, first served" basis. Reservation will still be possible though after the dates indicated on the site, but availability of rooms will no longer be guaranteed. Please note that daily conference shuttle bus will pick up partecipants from the affiliated hotels only.

Travel information

On June 24 bus transfers from Rome Fiumicino and Rome Ciampino will be offered at different times between 3pm and 7pm. On June 29 bus transfer will be organized to allow departure times from Rome Fiumicino and Ciampino starting from 3pm. **Reservation shall** be done not later than Friday, June 8, starting from Monday, May 28. For this reason partecipants are asked to review and update their user record, logging in at

https://agenda.infn.it/conferenceDisplay.py?confld=14798. The link can be reached also following the registration link on the conference website.

Information for all those who want to reach L'Aquila and/or LNGS independently are available on "Travel information" section of conference website, as well as maps and links to travel companies (e.g. bus timetable).

Events

Welcome party will take place on Monday June 25 at conference venue. Information about Underground laboratory guided tour and related slots will be defined at



registration desk on Monday June 25.

Half-day excursion is scheduled for Wednesday June 27, booking will be done at registration desk.

On Thursday June 28 Prof. F. K. Thielemann will give a public lecture entitled "Explosive nucleosythesis: what we learned and what we still do not understand" and in the evening Gala Dinner will follow.

Poster prize ceremony for best posters presented by PhD student at the conference will be held on Thursday June 28.

Contact

Further information is available on the conference website:

http://nic2018.lngs.infn.it

Organizing Committee mailing address is:

INFN -Laboratori Nazionali del Gran Sasso NIC2018 Organizing Committee Via Giovanni Acitelli 22 67100 Assergi (L'Aquila) Italy

Official email address is:

nic2018@Ings.infn.it

We look forward to welcome you at the Laboratori Nazionali del Gran Sasso

The NIC XV Organizing Committee:

Alba Formicola (chair, INFN - LNGS)

Matthias Junker (vice-chair, INFN - LNGS)

Francesca Cavanna (Genova University & INFN)

Giovanni Francesco Ciani (GSSI)

László Csedreki (INFN - LNGS)

Rosanna Depalo (Padova University & INFN)

Lucio Gialanella (University of Campania & INFN)

Izabela Kochanek (INFN - LNGS)

Gianluca Imbriani (Federico II University & INFN)

Conference secretary

Fausto Chiarizia (INFN - LNGS)



