



## XV International Symposium on Nuclei in the Cosmos

**Laboratori Nazionali del Gran Sasso, L'Aquila - Assergi, Italy**

**June 24 - 29 2018**

### **First 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 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. Thus the NIC XV program will consist of invited review talks and selected oral and poster contributions on important experimental and theoretical results in nuclear, particle and astrophysics researches, as well as a detailed and thorough exposition of the modern challenges in nuclear astrophysical scenarios. In addition a limited number of talks of more general interest related to neutrinoless Double Beta Decay and Dark Matter, will be included in the conference program to provide an overview of different aspects of underground physics. The scientific program will open on Monday, June 25 and will close on Friday June 29, 2018.

#### **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

## **Committees**

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OC - Organizing Committee:

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Lucio Gialanella (University of Campania & INFN)  
Izabela Kochanek (INFN - LNGS)  
Gianluca Imbriani (Federico II University & INFN)

Conference secretary

Fausto Chiarizia (INFN - LNGS)

**The hosting city**

LNGS is located nearby 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 traditions 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 features back to the Roman times

## **Important Dates**

Early Bird: starting from January 15 until April 25, 2018

Regular: until May 25, 2018

Abstract and poster submission: starting from January 15 until March 30, 2018 (via web form)

## **Fee and Support**

Conference fee and payment information will be announced by the end of December 2017.

Conference registration will be possible online from January 15 until May 25, 2018

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

The Committee encourages the attendance of young physicists. A limited amount of support will be available directly from the organizers for young scientists and in particular for PhD students and young Post-docs upon request. Detailed information will be posted on the website soon.

## **Proceedings**

Both oral contributions and selected poster will be peer reviewed by a dedicated committee of referees.

The proceedings of the conference will be published in an international journal as a special issue.

## **Accommodation and Travel Information**

On the conference webpage a list of affiliated hotels near the Lab with contracted rates has

been posted. Hotel reservation should be booked personally by the participants. Rooms will be available until the indicated deadline on "first come, first served" basis.

Reservation will still be possible though after the dates indicated, but availability of rooms will no longer be guaranteed. Reservation code for the workshop participants is "NIC 2018". Please mention this code when booking the room.

Please note that daily conference shuttle bus will pick up people from these hotels only.

Bus transfer will be organized from/to the airports Rome Fiumicino (FCO) and Rome Ciampino (CIA). Furthermore, bus transfer will be available each day from and to the hotels indicated on the conference website. More detailed information on how to reach LNGS independently (e.g. if shuttle bus timetable doesn't fit with participants' travel plans) will be posted soon on the conference website.

## **Contact**

Further information is available on the conference website:

**<http://nic2018.lngs.infn.it>**

Organizing Committee mailing address is:

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NIC2018 Organizing Committee  
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Official email address is:

**[nic2018@lngs.infn.it](mailto:nic2018@lngs.infn.it)**

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

The NIC XV Organizing Committee

