

The 11th European Summer School on Experimental Nuclear Astrophysics

Catania, Italy
12-19 June 2022

2nd Announcement

We have the pleasure to announce the “11th European Summer School on Experimental Nuclear Astrophysics (Santa Tecla School)”, devoted to the education of young Ph.D. students and young researchers. The school belongs to the European Network of Nuclear Astrophysics Schools (ENNAS), a network made by the European schools on nuclear astrophysics and related areas (the Santa Tecla, the Sinaia, the Russbach schools), having the common effort of preparing and educating young physicists in nuclear physics, astrophysics and their mutual relationship in the nuclear astrophysics field.

The school will deal with both various astrophysical issues, ranging from primordial nucleosynthesis to stellar evolution, and nuclear topics, including novel experimental approaches, radioactive ion beams, indirect methods, and plasma physics (in stars and in the laboratory).

The lectures of the school will be given by high-quality level scientists, selected for their didactical skills. In the spirit of the school, large room will be given to young researcher oral contributions. Specific sessions will be allocated to allow them to present their latest scientific results.

- **ENNAS**

The European Network of Nuclear Astrophysics Schools (ENNAS) is a project that aims to correlate the topics of the four European schools, to correlate their activities to better serve the community of science and students, and to correlate the efforts to obtain funds for these schools, from national and international agencies (i.e. EPS, EC...).

- **SCHOOL WEBPAGE AND CONTACT**

Updated information about the school, the program, the registration form, the fee payment will be given at the following:

-website: <https://agenda.infn.it/event/28073>

-email: astro2022@lns.infn.it.

- **VENUE**

The school will be held in Catania, at the Laboratori Nazionali del Sud (INFN-LNS) (www.lns.infn.it).

- **TIMING**

The school will be held from Sunday, 12th June, to Sunday 19th June. The seven school days include one day for arrivals (12.06.22) and one day for departures (19.06.22). During the whole period of the school, morning and afternoon lecture sessions will be given, together with young scientists' talk sessions.

- **HISTORY**

The school is internationally re-known as a cornerstone for young-scientist formation in the field of nuclear astrophysics as well as a “melting-pot” for the discussion of the up-to-date research activity. The previous editions of the school took place in 2001, 2003, 2005, 2007,

2009, 2011, 2013, 2015, 2017 and 2019. Traditionally, particular attention is devoted to the participation of young students of less-favoured countries.

PRELIMINARY SCIENTIFIC PROGRAM

Primordial Nucleosynthesis
Stellar Evolution
Hydrostatic and Explosive Nucleosynthesis
Plasmas in stars and the laboratory
Detectors and Facilities for Nuclear Astrophysics
Experiments with rare and radioactive isotopes
Indirect Methods for Nuclear Astrophysics

- **LIST OF CONFIRMED SPEAKERS**

P. Adsley, D. Balabanski, B. Bastin, C. Bertulani, A. Bonasera, R. Buompane, M. Busso, S. Cristallo, M. El Eid, C. Iliadis, G. Imbriani, J. Josè, T. Kajino (TBC), K.L. Kratz, D. Mascali, C. Massimi, M. Mazzocco, D. Mengoni, G. Meynet, S. Palmerini, S. Romano, S. Typel, M. Williams, H. Yamaguchi

- **CONTRIBUTIONS BY YOUNG RESEARCHERS**

A number of oral contributions from young researchers will be selected by the SOC. Please send your abstract to astro2022@lns.infn.it by May 10th 2022. Selected speakers will be granted the possibility to give a short talk in special sessions.

- **PUBLIC LECTURE**

A public lecture will be held by one most influent scientists and renown in the last decades, prof. Jocelyn Bell (Mansfield College, University of Oxford) whose discoveries led the world scientific community to a new era. The lecture is confirmed for June 15th.

- **ACCOMODATION & PAYMENTS**

The organizers encourage the participation of young researchers from Europe and from non-European countries. The number of participants will be strictly limited to 100. Students who may need a grant are welcome to contact the organizing committee by email at astro2022@lns.infn.it.

The registration fee is 300 € (which will cover the school expenses as well social activities as well as the proceedings).

The venue of the school is the Laboratori Nazionali del SUD (INFN-LNS), directly located in Catania. Rooms were booked at a special rate by the school secretary in the Nettuno Hotel (<https://www.hotel-nettuno.it/>), which is located in the Catania sea-side area. The cost is 80 € for a double room (breakfast included) and 100€ for a single one. The special prices are due only if it is booked via the school organization. Few rooms in the LNS guesthouse will be available for students who will receive a grant from the LOC. School buses will daily pick up school participants at the NETTUNO Hotel (<https://www.hotel-nettuno.it/>) about 30' before the start of the morning session and drive back at the end of the afternoon session.

A large number of restaurants, full price range and taste, is present in downtown Catania within walking distances from the hotel.

Fee for accompanying persons is 100 € which will cover school trip, welcome cocktail and social dinner.

The registration fee and the hotel booking “at a special rate” have to be paid in advance via the school travel agent, Mr. Alfio Romeo at the following email: a.romeo@shougun.it.

- **TRAVEL INFORMATIONS**

Catania is connected to many Italian and international airports by frequent flights operated by several airlines. Nettuno hotel can be reached from the airport using the ALIBUS (http://www.amt.ct.it/?page_id=2610) or by taxi (<http://www.radiotaxicatania.org/it/>) at a fixed rate, around 20 euro. On 12th and 19th June, shuttle bus will connect Catania airport and Nettuno hotel.

- **SOCIAL ACTIVITIES**

Social activities will be organized during the school. Depending on the Covid-19 conditions, it will also be possible to arrange a school trip in an Unesco world heritage site as well as a social dinner. A travel agency desk will be present at the hotel to arrange the trip. Further information will be given in the final announcement of the school.

- **IMPORTANT DEADLINES**

Invitation letter for VISA application: 30th April 2022

Registration: 10th May 2022

Abstract submission: 10th May 2022

Hotel booking: 25th May 2022.

- **HOSTING INSTITUTIONS AND SPONSORS**

The school is supported by INFN-LNS, Dipartimento di Fisica e Astronomia “E. Majorana” DFA-UniCT, Università degli Studi di Catania, ChETEC-INFRA, and Centro Siciliano di Fisica Nucleare e Struttura della Materia (CSFNSM).

- **SCIENTIFIC COMMITTEE**

M. Aliotta, C. Bertulani, M. Busso, E. Chavez, A. Coc, M. El Eid, T. Kajino, K.L. Kratz, S. Kubono, K. Langanke, J. Josè, T. Motobayashi, G. Rogachev, S. Romano, C. Spitaleri, O. Straniero, L. Trache, R.E. Tribble, Weiping Liu, M. Wiescher.

- **LOCAL COMMITTEE**

R.G. Pizzone (Chair), L. Lamia (co-Chair), G.F. D’Agata, G.L. Guardo, M. La Cognata, D. Lattuada, A.A. Oliva (webmaster), G.G. Rapisarda, M. L. Sergi, R. Spartà, A. Tumino.

- **SCIENTIFIC SECRETARY**

G.G. Rapisarda & M.L. Sergi astro2022@lns.infn.it

- **NEXT ANNOUNCEMENTS**

Final announcement will appear 2 weeks before the school beginning with details about lecturers, subject and program of lectures and final information.