

The 10th European Summer School on Experimental Nuclear Astrophysics

Catania, Italy
16-23 June 2019

1st Announcement

We have the pleasure to announce the “10th 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 topics (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 subjects, 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 worldwide acknowledged scientists, selected for their didactical skills. In the spirit of the school, large room will be given to young researchers 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 at coordinate the topics of the four European Schools, to balance their activities to better serve the community of researchers and students, and to bring together the efforts to obtain funds for these schools, from national and international funding agencies (i.e. EPS, EC...).

- **SCHOOL WEBPAGE, REGISTRATION FEE AND CONTACTS**

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/astro2019>

-email: astro2019@lns.infn.it.

We ask for a registration fee of 300 € which will cover the school expenses as well most social activities and shuttle service from/to airport (only on the first and last day of the school) as well as the proceedings book. A reduced registration fee will be available, upon request, for PHD students and young post-docs.

- **VENUE**

The school will be held in Catania, at the Laboratori Nazionali del Sud (www.lns.infn.it). A list of the available hotels will be given in the next announcements.

- **TIMING**

The school will take place from Sunday, June 16th, to Sunday June 23th. The seven school days include one day for arrivals (16.06.2019) and one day for departures (23.06.2019). During the whole period of the School, morning and afternoon lecture sessions will be given.

- **HISTORY**

The school is internationally endorsed 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 activities in the field of nuclear astrophysics. The previous editions of the school took place every two years since 2001. Traditionally, particular attention is devoted to the participation of young students from less-favoured countries, especially from the southern coast of the Mediterranean Sea.

- **PRELIMINARY SCIENTIFIC PROGRAM**

Primordial Nucleosynthesis and Early stars
Stellar Evolution
Hydrostatic and Explosive Nucleosynthesis
Plasmas in stars and laboratory
Detectors and Facilities for Nuclear Astrophysics
Experiments with rare and radioactive isotopes
Indirect Methods for Nuclear Astrophysics
Gravitational Waves-Neutron Stars Mergers
r-processes

- **SOCIAL ACTIVITIES**

An excursion to one of the most beautiful Sicilian UNESCO world heritage sites will be planned during the School. Further information about booking and payment will be given in the next announcements.

- **TRAVEL INFORMATIONS**

Catania has an international airport with connections to Rome and other European airports. Catania is located on the shores of the Mediterranean Sea, in a comfortable and spectacular environment. The LNS has a large lecture hall and many smaller sites for discussions and informal meetings. At the time of the school the weather is ideal in Sicily (around 25° C).

- **HOSTING INSTITUTIONS**

The school is organized by Laboratori Nazionali del Sud (INFN-LNS, Catania) and Dipartimento di Fisica e Astronomia "Ettore Majorana" (UniCT-DFA, Catania). The school is supported by ENSAR2 NUSPRASEN.

- **SCIENTIFIC COMMITTEE**

C. Spitaleri (Director, Catania), M. Aliotta (Edinburgh), M. Busso (Perugia), A. Coc (Orsay), M. El Eid (Beirut), T. Kajino (Tokyo), K.L. Kratz (Mainz), S. Kubono (Tokyo), K. Langanke (Darmstadt), J. José (Barcelona), T. Motobayashi (Tokyo), A.M. Mukhamedzhanov (TAMU), E. Nappi (Bari), O. Straniero (Teramo), G. Rogachev (TAMU), L. Trache (Bucarest), R.E. Tribble (BNL & TAMU), Weiping Liu (CIAE), M. Wiescher (South Bend).

- **LOCAL COMMITTEE**

R.G. Pizzone (chair), G. Agnello, M. La Cognata, P. Litrico, S. Palmerini, V. Potenza, S. Romano, R. Spartà.

- **SCIENTIFIC SECRETARY**

L. Lamia, astro2019@lns.infn.it

- **NEXT ANNOUNCEMENTS**

Next announcement will appear in March 2019 with details about lecturers, subject of lectures and final registration procedures.