

Fifth European Summer School

On

Experimental Nuclear Astrophysics

Sep. 20- 27, 2009
Santa Tecla, Sicily, Italy

Second Announcement

Nuclear astrophysics plays a key role for the understanding of the energy production in stars, the stellar evolution and the concurrent synthesis of the elements and their isotopes. It is also a key to explain the ashes of the early universe, to determine the age of the elements and thus the age of the universe, to predict the neutrino luminosity of the Sun and supernovae, etc. In this field nuclear reactions represent the “bone structure” for the above aspects, whose rates need to be determined in the laboratory. Although impressive progress has been made over the past decades, which was rewarded by Nobel prizes, there remain major problems, which challenge the basis of the present understanding.

We have the pleasure to announce the fifth European summer school on experimental nuclear astrophysics, devoted to the education of young researchers. The school will deal with various aspects of primordial and stellar nucleosynthesis, including novel experimental approaches, indirect methods, and radioactive ion beams. Furthermore, we plan to have lectures on complementary subjects of astrophysics such as dark matter and cosmic rays.

The fifth edition should be seen in the intention of the organizers as a cornerstone for young scientists formation in the field of nuclear astrophysics as well as the climax of the research activity in this decade. The previous editions of the school took place in 2001, 2003, 2005, 2007. In each edition and, of course, in the fifth one, particular attention will be devoted to the participation of young students of less favoured countries especially to the ones coming from the southern coast of the Mediterranean Sea

The 8 days of the school include one day for arrival (20.09.09) and one day for departure (27.09.09). In the remaining 6 days, there will be lectures every morning, while the afternoon will be scheduled both for lectures and seminars as well as young researcher contributions.

We expect that the participants arrive in Santa Tecla on 20.09.09, where a registration desk will be set-up. In the evening a welcome cocktail will take place, just before dinner.

The school takes place at the Santa Tecla Hotel, about 15 km north-east of Catania. Catania has an international airport with connections to Rome and other European airports. Santa Tecla is located directly on the Mediterranean sea, in a comfortable and spectacular environment. The hotel 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).

The organizers encourage the participation of young researchers from Europe and from non-European countries. The number of participants will be limited to 100. Applicants are welcome to contact the organizing committee by email at astro2009@lns.infn.it for pre-registration (see below). We ask for a registration fee of 300 € (which will cover the school expenses as well the social activities and shuttle service from/to airport as well as the proceedings book) and that should be

paid upon arrival. Credit card payment or via the school web-site is already working. Lodging expenses in full board are 110 € per day in a double room (145 € for a single room).

The school is supported by the INFN-LNS, GSI, EMMI, University of Catania (PHD course in Nuclear and Particle Astrophysics), INAF, Provincia di Catania.

School Registration as well as hotel booking is available at the school website

<http://agenda.ct.infn.it/conferenceDisplay.py?confId=169>

Hotel booking Deadline: 01.09.2009

We strongly recommend to book in advance via the website.

School lectures will be published on AIP conference proceedings series.

Scientific committee: C. Rolfs (Director, Bochum), C. Spitaleri (Director, Catania), M. Busso (Perugia), A. Coc (Orsay), P. Corvisiero (Genova), M. El Eid (Beirut), F. Kappeler (Karlsruhe), T. Kajino (Kajino), S. Kubono (Tokyo), K.L. Kratz (Mainz), J. Josè (Barcelona), T. Motobayashi (Riken), A. Mukhamedzhanov (TAMU), O. Straniero (Teramo), F. Terrasi (Napoli), R. Tribble (TAMU), M. Wiescher (Notre Dame).

Local committee: R.G. Pizzone (chairman), G. Agnello, A. Caciolli, A. Di Leva, D. Iaccarino, M. La Cognata, L. Lamia, S. Palmerini, S. Marrone, V. Potenza

Scientific secretary R.G. Pizzone

astro2009@lns.infn.it

www.lns.infn.it/astro2009

General Information

The school takes place at the Santa Tecla Hotel, about 15 km north-east of Catania. Catania has an international airport with connections to Rome, Milan and other European airports. Santa Tecla is located directly on the Mediterranean sea, in a comfortable and spectacular environment. The hotel 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).

The organizers encourage the participation of young researchers from Europe and from non-European countries. We ask for a registration fee of 300 € (which will cover the school expenses as well as the social activities and shuttle service from/to airport) . Lodging expenses in full board are 100 € per day in a double room (130 € for a single room). According to the budget of the school some grants (for local expenses coverage) will be available for students from less favoured countries.

Applicants are welcome to contact the organizing committee by email at astro2009@lns.infn.it for registration within **15.08.2009** and information.

Transportation: there will be a free shuttle bus from the airport to the hotel on September 20 and 27 in connection with flight arrivals.

Please find the preliminary program and registration form in the school web-site.

Deadline for registration and abstract submission: **15.08.2009**.