# Workshop on Nuclear Astrophysics at the Dresden Felsenkeller, 26-28 June 2017 Second and final circular, dated 13.06.2017

A new underground ion accelerator facility for nuclear astrophysics is currently under construction at the Felsenkeller site, Dresden. The accelerator tank has already been moved into the underground tunnel in April 2017. In order to update and discuss the science case for the new facility, in the context of the state of the art in the field of nuclear astrophysics, a brief workshop will be held in Dresden, from 26-28 June 2017.

The highlight of the workshop will be the ceremonial opening of the Felsenkeller tunnels in the presence of 2015 Physics Nobel Laureate Arthur B. McDonald, the Saxonian Minister of Science, the Mayor of Dresden, and the Rector of TU Dresden.

# **Topics**

- The sun, solar neutrinos, and solar abundances
- Stellar structure and abundances, hydrostatic stellar nucleosynthesis
- Novae, supernovae, X-ray and γ-ray bursts, mergers, explosive nucleosynthesis
- Experimental techniques and facilities

#### Scientific program

- The program consists of 23 invited oral presentations and 19 posters and is attached at the end of this circular.
- Detailed information on the venue is also included in the circular.

#### **Oral presentations**

- The time slot for all talks is 25 minutes plus 5 minutes discussion.
- Presentations should be given on a USB stick to the organizers at the latest during the coffee break before the session, in either Powerpoint or PDF format.
- As a rule, the presentations should be shown from the conference PC, but in special cases a presentation from the participant's laptop is also acceptable.
- Presenters should indicate whether they agree that a PDF version of their talk is made available on the workshop web page. For preliminary or unpublished material, it is fine to delete or blank out selected pages from the talk.

#### Poster session

- Posters from HZDR and TU Dresden will be collected by Thursday, 22 June, by Felix Ludwig (felix.ludwig@hzdr.de, phone 260-2387).
- Posters from outside Dresden should be brought on Wednesday morning to the poster session; the organizers will provide power strips to fix them to the wall.

### Venue and accommodation

- Participants are responsible for their own hotel booking.
- On Monday at noon, you have to get yourself to the venue HZDR Rossendorf, detailed instructions are in the scientific program.
- Monday evening, Tuesday morning and evening, and Wednesday morning we will provide a bus shuttle between the downtown hotels and the conference venue.

#### Airport pickup:

- On Monday, there will be a car going from Dresden airport to HZDR Rossendorf at ca. 13:30. If you want to be included in this trip, please contact Anne Varga by 19 June.
- On Wednesday, there will be two shuttles from Felsenkeller to Dresden airport: One at 12:30, the second at 15:30. If you want to be included in one of these trips, please contact Anne Varga by 19 June.

# Lunches, coffee breaks, workshop dinner

- The organizers will provide the coffee breaks on Monday and Tuesday.
- Lunch tickets for external participants (i.e. not HZDR and not TU Dresden) will be provided by the organizers for the HZDR Rossendorf canteen for Monday and Tuesday. Note the canteen only serves meals until 13:30.
- Tuesday at 20:00 there will be a workshop dinner at "Augustiner an der Frauenkirche" restaurant. Each participant should pay for their own dinner.
- On Wednesday, the organizers will provide sandwich lunch at Felsenkeller.

### Scientific advisory committee

- Zsolt Fülöp, MTA ATOMKI Debrecen, Hungary
- Brian Fulton, University of York, UK
- Alessandra Guglielmetti, Milano University, INFN, and LUNA collab., Italy
- Jordi José, UPC Barcelona, Spain

### **Organizers**

- Daniel Bemmerer d.bemmerer@hzdr.de
- Kai Zuber zuber@physik.tu-dresden.de
- Anne Varga (conference secretary) a.varga@hzdr.de