

**The Department of Physics “E. Pancini”, University of Naples “Federico II”, the National Institute of Nuclear Physics, Naples Division, and the National Institute for Nuclear Physics and Engineering “Horia Hulubei” announce the Symposium**

## **Advances and Challenges in Nuclear Fission and Quasi-Fission of Very Heavy and Superheavy Elements**

*Napoli, Italy, May 22-26, 2023*

### **1<sup>st</sup> Circular**

The **Symposium** will be held in **Napoli** (Italy) on **May 22 – 26, 2023**. It will continue the workshop held at ECT\* (Trento) in April 9-13, 2018. The main goal of the symposium is to discuss the state of the art of our present knowledge of fission and quasifission in the region of the very heavy and superheavy nuclei and to identify possible physics cases to be explored with the new facilities under development. The Symposium is intended as platform for intensive and detailed discussions, and for gathering proposals regarding experimental programs during the operation of these facilities.

In the following, details on the Organization of the Symposium, the Abstract Submission, the Accommodation and the Fee are given.

**1 – Venue.** The conference will be held at the Complesso Universitario dei Ss. Marcellino e Festo (Largo S. Marcellino 10, Napoli), an historical site of the University of Naples “Federico II”. Further details are on the **conference website** (<http://agenda.infn.it/event/20777>) and on the University website (<http://www.centrocongressi.unina.it/centro-storico>).

**2 – Topics.** The main **topics** are the following:

- ◆ *Fission of very heavy and superheavy elements*
- ◆ *Fission modes, fission barriers and half-lives*
- ◆ *Fission fragments properties*
- ◆ *Fission competition with  $\alpha$ -decay*
- ◆ *Fission and quasifission competition*
- ◆ *Production and Identification of superheavy elements*
- ◆ *Multinucleon transfer reactions*
- ◆ *Fission and quasifission studies with Radioactive Ion Beams*

**3 – Contributions.** We plan to have two different types of contributions:

- ◆ *Invited talks.* Speakers will cover the main topics of the conference (30 min+10 discussion).
- ◆ *Contributions from Young Researchers.* We welcome the attendance of PhD students. We strongly encourage them to submit an abstract on their research activity. We plan to include short talks (10 min) in the program.

**4 – Finances.** The conference fee will cover 4 lunches from May 23 (Tuesday) to May 26 (Friday), two daily coffee breaks, a Welcome Party on the evening of May 22 and the Social Dinner on May 25 (Thursday).

*Advances and Challenges in Fission and Quasi-Fission for the Superheavy Elements*

The fees are the following:

- ◆ 450 € for participant
- ◆ 150 € for accompanying person.

Fees can be paid by money transfer or credit card. We plan to open the Registration phase on March 1st, 2023. Participants can register by filling the registration module posted on the Conference Website. The fee for accompanying persons will cover the welcome cocktail and the social dinner.

**6 – Accommodation.** We are not able to offer a service for hotel booking. Please, consider that in the month of May a Cultural Event (*Maggio dei Monumenti*) is scheduled in Naples that is expected to attract many tourists. Therefore, we advise to make hotel reservations as early as possible.

**7 – Proceedings.** We are at present evaluating the possibility to produce a proceedings volume.

**8 – Contacts.** For further information, please contact Emanuele Vardaci or Nicolae Carjan at the respective e-mails: [vardaci@na.infn.it](mailto:vardaci@na.infn.it) or [carjan@theory.nipne.ro](mailto:carjan@theory.nipne.ro)