

SUBJECT:

**SSNET'17 - Conference on « Shapes and Symmetries in nuclei:
from Experiment to Theory »**

Registration and recent news: a. Special Sessions, b. SSNET Initiative

Dear Colleagues,

With the present message we would like to remind you that the Conference “Shapes and Symmetries in Nuclei: from Experiment to Theory” (SSNET 2017) will be hosted by the *Centre de Sciences Nucléaires et Sciences de la Matière* (CSNSM) in Orsay, France, and will be held at the CNRS center, *Gif sur Yvette* in the Paris region, from November 6 to 10, 2017.

SSNET 2017 - Registration and contact with the organizers

The relevant information concerning the registration, hotel reservations and other practical issues can be found on the conference website

<https://indico.in2p3.fr/event/14007>

and the organizers can be contacted using the email address

SSNET2017@csnsm.in2p3.fr

For your convenience, we also join the Second Circular containing all relevant information for registration, arranging the hotel reservations and/or contacting us in case of need.

SSNET 2017 - Special Sessions

This year we organize two special sessions focussing on two specific research lines, one related to nuclear isomers and the other related to the ab initio theories. The special experimental session with the working title:

"Isomers as stepping stones to nuclear structure, exotic nuclei and beyond"

will address the issue of nuclear isomers and their unique role in extending the frontiers of access to the very exotic nuclei, whose ground states have too short lifetimes for the present instrumental limitations. Since the presence of isomers is related to the existence of some specific conservation rules, often caused by symmetries, this subject is a natural element of the present Conference.

The special theoretical session with the working title:

"Ab initio approaches to nuclear structure"

will address the questions related to understanding nuclear structure from first principles. There have been exciting progress in the development and applications of ab initio methods to the description of light and more recently also to medium and even heavy nuclei. Several ab initio methods that utilize chiral nuclear forces as their input will be introduced and recent nuclear structure results will be highlighted. The predictive capabilities of these methods are challenged by the increasingly rich experimental information but also challenge nuclear experiments and test our understanding of nuclear forces.

SSNET Initiative - Special Issue and the Associated Publication Style

In parallel with providing a forum for an exchange of the newest ideas related to nuclear shapes and, more generally, to nuclear symmetries, from both the experimental and theoretical points of view, a specially designed publication project is foreseen. A special issue will be published related to the subjects of the conference, in an electronic format only. This publication — not to be confused with traditional conference proceedings — will contain only the original (unpublished) results or, possibly, mini reviews or overviews of certain subfields in our domain of research. With the aim of strengthening the importance of the scientific message addressing the shapes and symmetries, we will invite all interested researchers, participants or not, who are inspired to contribute in the Special Issue within the scientific scope of the meeting by publishing original results.