Third International Workshop "Shapes and Dynamics of Atomic Nuclei: Contemporary Aspects" (SDANCA-19), 3-5 October 2019, Sofia, Bulgaria



Description: The Third International Workshop "Shapes and Dynamics of Atomic Nuclei: Contemporary Aspects" (SDANCA-19) will be held in the Hotel of the Bulgarian Academy of Sciences (BAS) in Sofia, Bulgaria between the **2-nd** (arrival day) and **6-th** (departure day) of **October 2019**. The Workshop is organized by researchers from the Institute of Nuclear Research and Nuclear Energy (INRNE) in BAS with the financial support of the Bulgarian National Science Fund under contracts No. KP-06-N28/6 and KP-06-RILA/6. It appears as the third issue of the workshop <u>SDANCA-15</u> and <u>SDANCA-17</u> held in the same place in 2015 and 2017.

<u>Aim</u>: The aim of the Workshop is to collect highly motivated researchers in the field of nuclear shape dynamics and related phenomena providing a possibility to discuss advanced ideas, open problems and future directions for developments in the subject. It is expected to outline points of common interest and inspire new ideas in the various contemporary aspects of the theoretical and experimental approaches to the shape-dynamics problem in atomic nuclei and other physical systems. We believe this meeting can strengthen the existing collaborations and attract newly interested colleagues to the scientific community formed around the topic.

Main topics:

- Collective and microscopic models for nuclear deformations;
- Shapes and symmetries geometric and algebraic aspects;
- Shape coexistence and shape-phase transition phenomena;
- Complex shapes, isomers and cluster phenomena;
- Shapes and dynamics at the limits of stability;
- New data on nuclear deformations and advanced experimental techniques;
- Interdisciplinary aspects: shape phenomena in other physical systems.

Program: The program will start in the morning of **3-rd of October** (Thursday) and will end in the evening of **5-th of October** (Saturday) 2019. We plan to schedule 25-30 min standard talks as well as possibly shorter 15 min reports depending on the number of participants. The sessions will be organized by topics and the session convenors will have the possibility to conduct a common discussion at the end of each session. A final discussion is considered in the end, providing an opportunity to outline perspectives for further developments and joint activity.

Publication: We plan to publish the Workshop contribution articles in a regular issue of the Bulgarian Journal of Physics (BJP) after refereeing. Instructions for authors and the manuscript style package in LaTeX are available on the journal web page <u>http://www.bjp-bg.com/</u>. We shall invite all speakers who wish to contribute with articles to provide the manuscripts shortly before or during the Workshop in order to publish them by the end of the year. We envisage a typical length of the contribution articles not exceeding 10 pages.

<u>Conference site</u>: The Workshop program, accommodation and a full board service are arranged in the Hotel of the Bulgarian Academy of Sciences (BAS) in Sofia, <u>Shipchenski prohod Str. 50</u>. WiFi internet connections are available and a multimedia projector will be provided for the presentations. The hotel is situated at 10 mins walking distance from Pliska Place (former Hotel Pliska), from where a 5 mins bus connection to the city center is available. Also, a tram line connection to downtown is available from a station in front of the hotel campus. The hotel web site is <u>http://www.domnaucheniya.com/contacts/</u> (in Bulgarian only).

Fee and arrangements: The workshop fee, covering 4 nights accommodation, full board for 3 days (3-5 Oct) including an official dinner, dinner following arrival on 2-nd of October, breakfast on 6-th of October and the printed BJP volume with contribution articles, will be collected in cash in EURO at the registration in the Hotel. The fee is 350 EUR for regular participants and 220 EUR for students and accompanying persons. Single rooms, double rooms and apartments are available. Note: the number of rooms is limited and will be secured for participants in the order of registration. In case of overbooking the late registered participants will be accommodated in near hotels which may slightly increase their fee.

Social events: The city of Sofia provides a rich variety of cultural events and entertainments. The organizers will be happy to help participants who would wish to visit any particular event. Depending on the time allowed by the Program a collective sightseeing may be organized.

Access from the Airport: The BAS hotel can be easily reached from Sofia Airport through Pliska Place. Pliska Place (former Hotel Pliska) can be reached from Terminal 2 of Sofia Airport by the public transportation bus line 84. The trip takes about 20-25 minutes. Tickets are available at the bus-stop and from the bus driver. The price of the ticket is 1.60 Lev (about 0.8 EUR) per passenger with each large piece of luggage requiring an additional ticket at the same price. Alternatively a taxi can be used.

<u>Visa</u>: Formal invitation letters for participants who need to apply for a visa can be sent by the Organizers if the required details are provided to the contact e-mail below.

Registration for participation: Colleagues who wish to participate in the Workshop are invited to *fill in the registration form* available on the <u>Workshop web page</u> and notify us by e-mail by **30-th of June** as well as *submit an abstract of their talk* (up to 1 page in LaTeX, template available on the web page) to the <u>contact e-mail</u> below by **15-th of July 2019**.

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Workshop web page: http://ntl.inrne.bas.bg/events/sdanca19/

International Program Committee:

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