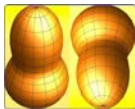


**Fourth International Workshop “Shapes and Dynamics of Atomic Nuclei: Contemporary Aspects” (SDANCA-21), 16-18 September 2021, Sofia, Bulgaria**



**Description:** [The Fourth International Workshop “Shapes and Dynamics of Atomic Nuclei: Contemporary Aspects” \(SDANCA-21\)](#) will be held in Sofia, Bulgaria between the **15-th (arrival day)** and **19-th (departure day)** of **September 2021**. The Workshop is organized by researchers from the Institute of Nuclear Research and Nuclear Energy (INRNE) in the Bulgarian Academy of Sciences (BAS) with the financial support of the Bulgarian National Science Fund under contracts No. KP-06-N48/1, No. KP-06-N28/6 and KP-06-RILA/6. It appears as the fourth issue of the Workshop under the names [SDANCA-15](#), [SDANCA-17](#) and [SDANCA-19](#) held in 2015, 2017 and 2019. This time the Workshop will be held in a **hybrid form combining talks of on-site and on-line participants**.

**Aim:** The aim of the Workshop is to gather researchers in the field of nuclear shape dynamics and related areas providing a possibility to discuss advanced ideas, actual problems and future developments in the subject. It is expected to outline directions of common interest and inspire new ideas in various contemporary aspects of the theoretical and experimental approaches to the shape-dynamics problem in the nucleus and other physical systems. We believe this meeting can strengthen the existing collaborations and inspire new activities on the topic.

**Main topics:**

- *Collective and microscopic theories of nuclear deformation;*
- *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 **16-th of September** (Thursday) and will end in the evening of **18-th of September** (Saturday) 2021. Depending on the number of participants we plan to schedule 20+5 min talks for onsite participants and 15+5 min talks for online 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.

**Publication:** We plan to publish SDANCA21 contribution articles. The publisher will be decided in due time after the format of the contributions and the topics is shaped out.

**Conference venue:** The Workshop will be held in the [Venue Hall “Incubator”](#) of [Sofia Tech Park](#), located at [Tzarigrad Road 111, Sofia](#).

**Accommodation:** The participants will be accommodated in the Hotel of the Bulgarian Academy of Sciences (BAS) in Sofia, [Shipchenski prohod Str. 50](#) (the venue of the previous SDANCA workshops). The hotel is situated at 10 mins walking distance from Pliska place (former Hotel Pliska). The BAS hotel web site is <http://www.domnaucheniya.com/contacts/>. From there the Sofia Tech Park (conference venue) is easily reached through Pliska by bus lines 76, 204, 213, 306 and 604, about 5 mins, to St. Ana Hospital (Airport direction). Alternatively bus lines 1, 3, 5 and 6 passing through St. Ana Hospital can be taken from Geo Milev terminal close to the BAS hotel. Depending on the number of onsite participants the organizers may arrange special transportation to the conference venue.

**Fee and arrangements:** The Workshop fee for onsite participants, covering 4 nights accommodation, breakfasts in the BAS hotel, coffee breaks and lunch at the conference venue, working materials and publication costs, will be collected in cash in EURO upon the arrival in the BAS hotel or before the opening at the conference venue. The fee is 350 EUR for regular participants and 250 EUR for students and accompanying persons. For the online participation the fee is 50 EUR to cover the publication cost and the professional online technical support. The way of payment will be decided in due time.

**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. We hope that the present situation will be favorable in the middle of September.

**Access from the Airport:** [The BAS hotel can be easily reached from Sofia Airport through Pliska Place](#). Pliska Place 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](#) (only the company at the official taxi station is recommended).

**Visa:** 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 [Workshop web page](#) and notify us by e-mail by **1-st of August** as well as *submit an abstract of their talks* (up to 1 page in LaTeX, template available on the web page) to the [contact e-mail](#) below by **15-th of August 2021**.

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**Workshop web page:** <http://ntl.inrne.bas.bg/events/sdanca21/>