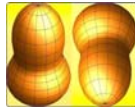


## International Workshop “Shapes and Dynamics of Atomic Nuclei: Contemporary Aspects” (SDANCA-15), 8-10 October 2015, Sofia, Bulgaria



**Description:** [The International Workshop “Shapes and Dynamics of Atomic Nuclei: Contemporary Aspects” \(SDANCA-15\)](#) will be held in the Hotel of the Bulgarian Academy of Sciences (BAS) in Sofia, Bulgaria between the **7-th** (arrival day) and **11-th** (departure day) of **October 2015**. The Workshop is organized by the research group on “Models of Complex Deformed Nuclei” in the Institute of Nuclear Research and Nuclear Energy (INRNE) in BAS with the financial support of the Bulgarian National Science Fund under contract No. DFNI-E02/6

**Aim:** The aim of the Workshop is to summarize the contemporary aspects and to formulate in a concise form the open problems in the study of nuclear structure and dynamics in the presence of different kinds of shape deformations. The idea is to combine up-to-date theoretical and experimental knowledge on the subject and to outline a common study direction focused on the search for and description of new shape phenomena and their effect on nuclear structure and stability in different mass regions. A major practical aim of the Workshop is to connect scientists with mutually complementary expertise and to inspire possible new collaborations on the subject of complex nuclear deformations.

### **Main topics:**

- *Collective and microscopic models for nuclear deformations;*
- *Shapes and symmetries - geometric and algebraic aspects;*
- *Coexisting shapes and shape-phase transition phenomena;*
- *Exotic shapes;*
- *Shapes and dynamics at the limits of stability;*
- *New data on nuclear deformations and current experimental techniques;*
- *Interdisciplinary aspects: links to shape phenomena in other physical systems.*

**Program:** The program will start in the morning of **8-th of October** (Thursday) and will end in the evening of **10-th of October** (Saturday) 2015. 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 short common discussion at the end of each session. A final discussion session in a

round-table format is considered for the last afternoon providing an opportunity to outline perspectives for further developments and joint projects.

**Publication:** The Workshop contribution manuscripts will be published in a special issue of the [Bulgarian Journal of Physics](#). Instructions for authors and the manuscript style package in LaTeX are available on the journal web page <http://www.bjp-bg.com/>. We shall invite all the speakers to provide the manuscripts during the Workshop in order to be able to publish them by the end of the year. There is no fixed length restriction, but we would expect regular article sizes for the contributions.

**Conference site:** The Workshop program, accommodation and a full board service are arranged in the Hotel of the Bulgarian Academy of Sciences (BAS) in Sofia, [Shipchenski prohod Str. 50](#). 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, 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 <http://www.domnaucheniya.com/contacts/> (in Bulgarian only).

**Fee:** The workshop fee covering 4 nights accommodation, full board for 3 days (8-10 Oct) including an official dinner on 9-th of October and breakfast on 11-th of October will be collected in cash in EURO at the registration in the Hotel. The fee will vary between 250 and 300 EUR depending on the room type. Single rooms, double rooms with possible single occupancy and apartments are available. For accompanying persons and students the fee will vary between 200 and 250 EUR. Invoices for the payments will be given by the hotel administration in Bulgarian currency according to the official exchange rate.

**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 or to make sightseeing.

**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 Lev (about 0.5 EUR) per passenger with each large piece of luggage paying an additional ticket at the same price. Alternatively a taxi can be used.

**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 have to *fill in the registration form* available on the [Workshop web page](#) below and notify us by e-mail by **1-st of July** as well as to *submit an abstract of their talk* (up to 1 page in LaTeX, template available on the web page) to the [contact e-mail](#) below by **31-st of July 2015**.

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**Workshop web page:** <http://ntl.inrne.bas.bg/events/sdanca15/>

**International Program Committee:**

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Ana Georgieva (Sofia)

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