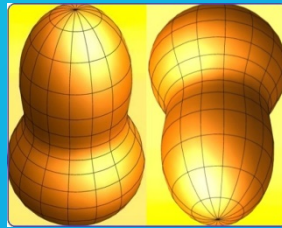


International Workshop “Shapes and Dynamics of Atomic Nuclei: Contemporary Aspects” (SDANCA-15)



**8-10 October 2015, Sofia
Bulgaria**

SDANCA

Aim: To summarize the *contemporary aspects* and to outline the *open problems* in the study of nuclear structure and dynamics in the presence of *shape deformations*. To combine up-to-date theoretical and experimental knowledge 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. To connect scientists with mutually complementary expertise and to inspire possible *new collaborations* on the subject of complex nuclear deformations.

Motivation and support: BNSF project, contract No: DFNI-E02/6: *Energy of isomeric and of short-living nuclear excitations: effects of deformation on the structure and stability of atomic nuclei*



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*

Workshop home work

- Could we outline the most actively developing approaches in the field of nuclear shape phenomena?
- Is there a potential for the opening of new directions (theory and experiment)?
- What kind of collaboration schemes would be most successful in the field?
- To what extent the subject of nuclear deformations and the related phenomena fits the current funding schemes?
- Should we think to organize similar workshops in the future: how often, in what format?

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