

Preface

The 7th International Conference “Nuclear Structure and Related Topics” (NSRT15) was held at the Bogoliubov Laboratory of Theoretical Physics (BLTP) of Joint Institute for Nuclear Research (JINR) from the 14th to the 18th of July 2015. The Conference was attended by 110 participants from 23 countries of Europe, Asia, America, Africa and Australia. The NSRT15 was dedicated to the 90th anniversary of Prof. V. G. Soloviev (1925-1998), the prominent scientist and the founder of Dubna school in the nuclear structure theory. It is worth noting that Prof. V. G. Soloviev initiated and organized several International conferences and schools on selected topics of nuclear structure regularly held by the Joint Institute for Nuclear Research. He was the member of the Advisory Committee of the first NSRT Conference in 1997. The Conference Program was related to the current studies in low-energy nuclear physics at JINR and, in particular, BLTP. Most of the conference reports dealt with the studies of atomic nuclei far from the stability valley. Certainly, this feature might be expected since approaching the nuclear stability border is the main challenge in the contemporary low-energy nuclear physics.

The Conference Program included two exciting reports devoted to the ambitious experimental projects: ELI-NP which is part of the pan-European project Extreme Light Infrastructure (Romania) and SPES – the novel RIB facility at the Legnaro National Laboratories of INFN (Italy). The unexpected feature of the Program turned out to be of heightened interest in properties of low-lying states both from experimentalists and theoreticians. This subject was discussed in about 20% of the reports. The physics of giant resonances was discussed less actively, moreover, there were no experimental reports on the subject. Among other theoretical talks the popular themes were the energy density functionals and the different aspects of pairing correlations. Also, the following issues were covered in the presentations: fission, structure of halo-nuclei, charge-exchange excitations, and nuclear reactions. In the part which might be considered as “related topics” some problems of the hypernuclear physics and nuclear astrophysics were discussed.

Hard and fruitful work at the conference sessions was complemented with the social program. It was started in the first conference day by the evening welcoming reception which provided an engaging atmosphere for getting to know each other and starting discussions. On the next day evening the concert of classical music by two young talented musicians, pianist Lukas Geniušas and cellist Eugene Rummyantsev was organized. Both the musicians are laureates of many contests and, in particular, the prestigious Tchaikovsky competition. Their playing was fantastic and the participants got a nice possibility to relax after the day full of hard science. The excursion on Thursday brought the people to a small town of Sergiev Posad with the Trinity Lavra of St. Sergius (Troitse-Sergiev monastery) – the most important Rus-

sian monastery and the spiritual centre of the Russian Orthodox Church. The Trinity Lavra was inscribed on the UN World Heritage List.



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With best wishes,
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