## Preface

The Twenty Fifth International Workshop on Nuclear Theory was held from June 26 to July 1, 2006 in the Rila Mountains, Bulgaria.

The workshop took place in the style that by now has become a tradition: a number of talks and discussions on modern topics of nuclear physics mainly related to the studies conducted in the Laboratory of Theoretical Nuclear Physics of the Institute for Nuclear Research and Nuclear Energy of the Bulgarian Academy of Sciences. Colleagues from Belgium, Bulgaria, France, Germany, Greece, Italy, Romania, Russia, South Africa, Spain, Switzerland, USA and Japan who work in the same field took part in the workshop. In friendly and informal atmosphere new results on nuclear theory and experiment as well as achievements of fruitful collaborations were discussed. New join projects for research were initiated. The Workshop provided also a chance for young scientists and students to contact prominent physicists.

The main subjects of the presentations and discussions were:

- Nucleon–Nucleon Correlation Effects on Nuclear Structure and Reactions
- Field Theory and Algebraic Methods in Nuclear Theory
- Exotic Nuclei and Few–Body Systems
- Advanced Studies of Many-Fermion Systems
- Nuclear Astrophysics

The 25<sup>th</sup> edition of the workshop is a good reason to look back and to remember the first nuclear theory seminar, which took place in the Rila Mountains. We are indebted for the idea of the workshop to Professor Ivan Zhelyazkov Petkov, the founder of the Nuclear Theory Group of the Institute for Nuclear Research and Nuclear Energy in Sofia. In the distant 1980 he suggested to his colleagues at the end of the academic year to go out of the city and to draw the line discussing the latest results and planning jobs for the nearest future. And because he loved mountains and knew all about mushrooms Professor Petkov proposed to go to the Rila Mountains. The first workshop was more like an escape then a formal meeting and we have tried over the years to keep this informal, relaxed atmosphere of the first editions of the workshop.

Gradually other colleagues from our Institute, theoreticians and experimentalists, then physicists from other Bulgarian institutes and universities started to participate in the workshop. Later on it has been realized that the workshop is a very good occasion to meet colleagues from abroad who collaborated with us or shared

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the same interest in nuclear physics. So the workshop, which has been established as a local event, became an international meeting. Physicists from all over the world came here to discuss the latest topics of nuclear science and a lot of successful collaborations have been set up. Now our workshop is widely known among the nuclear physicists as "the Rila Workshop on Nuclear Theory". I would like to thank all our colleagues and friends from abroad, who participated in the workshop and advertised it among the physics community even in those years when there were just bad news about our country.

The organization of the workshop was made possible over the years by substantial support from the Directorate of the Institute for Nuclear Research and Nuclear Energy and the Bulgarian Nuclear Society.

I would like to thank all participants for contributing to the success of the Workshop.

The next Twenty Sixth International Workshop on Nuclear Theory will be held from June 25 to June 30, 2007 in the Rila Mountains.

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