

PREFACE

The Third Asia-Pacific Conference on Few-Body Problems in Physics (APFB05) was held from July 26 to 30 of 2005 in Nakhon Ratchasima, Thailand, with School of Physics, Suranaree University of Technology (SUT) as its host. It succeeded the first APFB meeting in Tokyo in 1999 and the second in Shanghai in 2002. The APFB05 was the first international conference in physics held in Thailand.

The APFB05 took place at a most appropriate time to let the participants to exchange very recent results from important laboratories and universities, to enhance contacts among the Asia-Pacific few-body-physics community and colleagues in other continents, to boost physics research and education in Thailand and countries in the region, and to introduce the culture and beauty of Thailand to scientists worldwide.

The scope of the conference covered research in the following fields: Few-nucleon systems (three-body forces and few-nucleon dynamics); Hadron structure and QCD; Exotic hadrons and atoms; Effective field theory in few-body physics; Electromagnetic and weak processes in few-body systems; Few-body dynamics in atoms, molecules, Bose-Einstein condensates and quantum dots; Few-body approaches to unstable nuclei, nuclear astrophysics and nuclear clustering aspects; Hypernuclear physics (hadron-hyperon, hyperon-hyperon interactions); Relativity in few-body physics, and others.

Over 100 physicists from around the world participated in the scientific program of the APFB05. Many of the delegates were very senior and eminent scientists indeed (both from the theoretical and the experimental sectors), attracted to the conference variously by their scientific and personal relationship with the conference organizers, by the conference scientific program, or by a common interest in building science capacity in the region. Accordingly, the caliber of their contributions has ensured the high standard of the proceedings, and made its compilation a great pleasure.

Over 1000 students from 5 universities and 33 high schools in the northeastern region of Thailand attended the opening ceremony and other activities arranged by the conference. The atmosphere of the conference and especially the keynote lecture by Prof. Chen-Ning Yang (1957 Nobel laureate in Physics) on thematic melodies of 20-th century theoretical physics impressed them very much. Prof. Chen-Ning Yang is one of the few physicists whom the Thai pupils may know well. It is expected that more students would choose to study physics or related subjects for their university educations.

The APFB05 continued the convention set up in the APFB99 conference to offer an award with the aim of encouraging young scientists in this field. There appeared to be so many excellent young speakers that it was very hard to select only one to be awarded. After consultation among senior scientists, the award for the best presentation by a young scientist was given to Dr. Yu-Chiun Chen from the National Taiwan University.

While the essence of a conference and of the proceedings is the scientific material presented in talks and subsequent papers, there would not be a conference or proceedings without extensive sponsorship. The conference organizers greatly appreciate funding received from the various organizations displayed on the following page. Their contributions enabled the conference to support all of the participants.

We would like to thank all of the participants for attending the conference and contributing to the conference valuable talks. We would like to thank the International Advisory Committee, the Scientific Program Committee, and the members of the Local Organizing Committee for their contribution to the conference. We would like to thank SUT personnels and especially students from School of Physics for helping to organize the conference. We would like to thank Mr. Ayut Limphirat, Chakrit Nualchimplee, and Chalump Oonariya for getting all contributions in the correct format.

The Editors
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