

Preface

These are the proceedings of the International Symposium on Contemporary Physics organised by the National Centre for Physics (NCP) in Islamabad, Pakistan, from 26 to 30 March, 2007. The Symposium was organised to celebrate the completion of the new campus of the NCP, an important milestone in the history of the NCP.

Since the NCP is set up to promote all aspects of physics research and teaching in Pakistan it was decided to hold a meeting which would review the current status of research in major frontline areas of physics. The areas of research reviewed in this symposium were Condensed Matter Physics, Particle Physics, Quantum Optics, Quantum Computing and Laser Physics, Nano-sciences, Synchrotron Radiation, Relativity, Astrophysics and Cosmology, Plasma Physics. Leading physicists reviewed these frontier areas of physics. The total number of participants, including 23 speakers, was 271, mostly from Pakistan. It was heartening to see the huge participation of a large number of young students and researchers from all over Pakistan. In fact the number of requests for participation was very high and the organising committee had to restrict the number because of financial and logistical restrictions.

We were very fortunate to have the honour of hosting Dame Louise Johnson, the widow of Prof. Abdus Salam, as one of the distinguished speakers. Prof. Salam's dream was to have an active physics research centre in Pakistan and we are sure that he would have been quite pleased by the progress being made by the NCP.

We would like to thank, above all, the speakers who with their well prepared and well presented talks made the Symposium a memorable event. Never before in Pakistan have we had the occasion to gather such a distinguished faculty on such a broad spectrum of subjects of topical interest.

The symposium was a great success. It was the NCP's major step towards fulfilling one of its objectives, namely inviting eminent physicists from all over the world to share their knowledge and expertise with relatively less-knowledgeable and younger scientists from developing countries. To make this possible financial and institutional support was necessary. The NCP provided the primary institutional support. We are most grateful to Prof. Qasim Jan, Vice-Chancellor of Quaid-i-Azam University, for providing institutional support

including use of the Geophysics and Physics Auditorium. The Symposium would not have been a success without the sponsorship and generous financial support of the Abdus Salam International Centre for Theoretical Physics (ICTP), the Higher Education Commission (HEC) and the Pakistan Academy of Sciences. We are grateful to both these organisations for their support. We would also like to thank the members of the International Advisory Committee, the International Steering Committee and the Local Steering Committee for valuable advice.

Without the help of the staff of the NCP the conference would not have been a success. Our special thanks go to Ubaidullah Khalid, Gulzaman Khan, Kashif Sarfraz Khan, Mansoor Sheikh, Ashfaq Ahmad and the staff of the computer section. Special thanks go also to all the students of the NCP (far too many to name here) who voluntarily did all the tough legwork to make the running of the conference a great success.

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