

## Foreword

The 22nd International Conference on Statistical Physics of the IUPAP, STATPHYS 22, was held at the Indian Institute of Science, Bangalore, India, from 4–9 July 2004.

The STATPHYS Conferences are the largest general meetings in Statistical Physics. They are the major established international conferences in this field and are very inclusive (chemical engineering, biology, information science... are all welcome parts). The conference theme has strong links to many branches of Physics and Chemistry, for instance Condensed Matter Physics and Physical Chemistry, and has applications in many other fields such as High Energy Physics and Astrophysics. Internationally, the subject is perceived to be of great importance by all countries with scientific research programmes.

Several world-class theoretical and experimental research groups have developed in India over the past 25 years, and these have made important contributions to the subject; some of these have received recognition in terms of plenary and invited talks at STATPHYS 22. However, India had never hosted STATPHYS earlier. So the time was ripe for the statistical physics community here to host this most prestigious international conference. The STATPHYS 22 meeting brought enormous benefit to researchers in physics and allied fields in India, especially the younger generation of Indian scientists who are doing doctoral and postdoctoral work in statistical physics and related areas. Thus, from India nearly 250 participated in this conference; there were in all about 650 attending it, from 46 countries.

The Scientific Programme consisted of a formal inauguration session which was followed by five days of exciting lectures ranging over all aspects of Statistical Physics, many presenting important new results for the first time to the community. Apart from the formal question-and-answer sessions, there was vigorous, continuous, scientific interaction among the participants. There were two Boltzmann Award lectures, nine plenary talks, many invited talks, and several contributed oral and poster presentations on a variety of topics.

We would like to take this opportunity to thank all our sponsors, namely, the International Union of Pure and Applied Physics (IUPAP), Indian Institute of Science (IISc) Bangalore, Department of Science and Technology (DST) New Delhi, Council for Scientific and Industrial Research (CSIR) New Delhi, Indian Academy of Sciences (IAS) Bangalore, International Centre for Theoretical Physics (ICTP) Trieste, Raman Research Institute (RRI) Bangalore, Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR) Bangalore, Journal of Statistical Mechanics: Theory and Experiment (JSTAT) UK, Institute for Financial Management and Research (IFMR) Chennai, India, INDO-US Science and Technology Forum New Delhi and ICICI Research Centre, Chennai, India. We would also like to thank the Chairmen of the previous and current C3 Commissions, namely, Professor K Binder and Professor M Barma, as well as all the scientists who served on the Steering Committee, National and International Advisory Committees, the Topics Committee, National Organizing Committee and the Local Organizing Committees. Special thanks go to our Student Volunteers, members of the Conference Secretariat, and Travel Corporation of India (TCI).

*Foreword*

Finally we would like to thank the editorial board of *Pramana* for agreeing to publish the proceedings in *Pramana* and the staff at the editorial office for all their help in the preparation of the Proceedings of STATPHYS 22. The proceedings are being brought out in two consecutive issues of *Pramana*.

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