Foreword

This issue of the Proceedings–Mathematical Sciences is the second special issue devoted to the Spectral Theory of Schrödinger Operators, the first one being Volume 104 (4) (1996). This issue is devoted to the articles presented at the Indo-US Workshop on Spectral and Inverse Spectral Problems for Schrödinger Operators held at the University of Goa, Goa, India, during 14–20 December 2000. The Workshop was attended by 34 researchers from six countries, namely Denmark, France, Germany, India, Japan, and the United States. Each of the articles in this issue was independently refereed according to the standards of the journal.

The identification of the spectral types of Schrödinger operators is one of the main interests in this area. The spectral types of Schrödinger operators, either the continuous version acting on subsets of $\mathbb{R}^d$, or the discrete version acting on lattices, are studied for different families of deterministic potentials, random potentials, magnetic fields, and time-dependent potentials. Other issues of interest are the asymptotic properties of the time evolution, as studied in scattering theory, the behavior of the eigenfunctions, as studied in the theory of Anderson localization, and the finer properties of the density of states related to the random potentials.

All the articles in this issue contain original research results. In addition, the articles of Ashbaugh, of Combes, Hislop, Klopp and Nakamura, of Hinz, and of Stolz contain timely reviews of their subject matter.

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