Lectures on operator theory

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T. S. S. R. K. Rao

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Preface

The National Board for Higher Mathematics (NBHM) of India has initiated a program of Advanced Training Schools (ATM) in Mathematics with a view to provide training in various areas of Mathematics to research scholars and young faculty, working in various Indian Universities and Institutes.

An Advanced Instructional School (AIS) on Functional and Harmonic Analysis was held in July 2006 at the Indian Statistical Institute (ISI), Bangalore under the supervision of Dr T. S. S. R. K. Rao and Dr E. K. Narayanan. Lectures covering basic aspects of Functional Analysis and Spectral Theory were given by Dr Rao and Dr B. Bagchi in this program.

As a follow up of this program a week long 'Workshop on Operator Theory' was held at ISI Bangalore in June 2007. Professor G. Godefroy of the University of Paris VI and Professor G. L. Price of the US Naval Academy have lectured in this program on 'Some linear operators and their invariant subsets' and 'An introduction to E-0-semigroups. Professor Godefroy also gave a memorial lecture in the honor of Professor G. Choquet.

This monograph contains a reproduction of the notes prepared by the speakers during these programs. I thank the NBHM for completely funding the above programs including international travel of the speakers and the Ramanujan Mathematical Society for agreeing to bring out the lecture notes in this form. I also thank Professor S. K. Pal, Director of ISI for his encouragement and the Head of the ISI at Bangalore, faculty of ISI, the Indian Institute of Science, co-workers, for the logistic support. Thanks are also due to Mrs Ashalatha and Miss Mohanadevi for their help in typing these notes. The authors thank Professor A. Mangasuli for carefully proof reading these notes. I thank my wife Sireesha for tolerating my busy summer schedules.

T. S. S. R. K. Rao

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