

Preface

The *Minicorsi of Mathematical Analysis* have been held at the University of Padova since 1998, and the subject of the Lectures ranges in various areas of Mathematical Analysis including Complex Variable, Differential Equations, Geometric Measure Theory, Harmonic Analysis, Potential Theory, Spectral Theory.

The purposes of the Minicorsi are:

- to provide an update on the most recent research themes in the field,
- to provide a presentation accessible also to beginners.

The Lecturers have been selected both on the basis of their outstanding scientific level, and on their clarity of exposition. Thus the Minicorsi and the present collection of Lectures are particularly indicated to young Researchers and to Graduate Students.

In this volume, the organizers have collected most of the lectures held in the years 2000–2003, and intend to provide the reader with material otherwise difficult to find and written in a way also accessible to nonexperts.

The organizers wish to express their sincere gratitude to the several participants who have contributed to the success of the Minicorsi.

The organizers are also indebted to the University of Padova, and in particular to the ‘Dipartimento di Metodi e Modelli Matematici per le Scienze Applicate’, and to the ‘Dipartimento di Matematica Pura ed Applicata’ of the University of Padova, both for the hospitality, and for the financial support. The organizers also acknowledge the financial support offered by the ‘Gruppo Nazionale per l’Analisi Matematica, la Probabilità e le loro Applicazioni’, and the European Commission IHP Network “Harmonic Analysis and Related Problems”.

P. Ciatti, E. Gonzalez, M. Lanza de Cristoforis, G.P. Leonardi