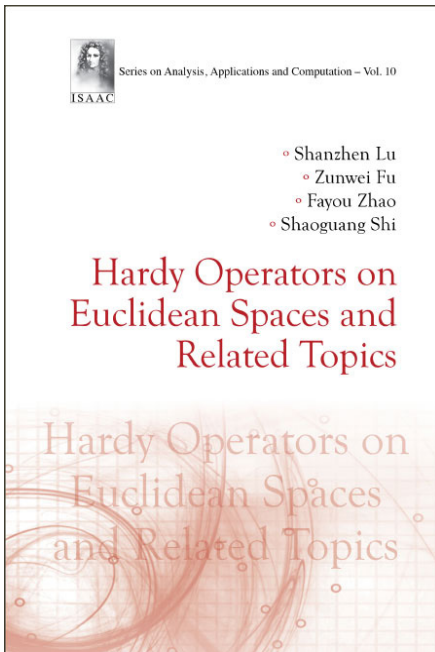


Hardy Operators on Euclidean Spaces and Related Topics



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ABOUT THE BOOK

In many branches of mathematical analysis and mathematical physics, the Hardy operator and Hardy inequality are fundamentally important and have been intensively studied ever since the pioneer researches. This volume presents new properties of higher-dimensional Hardy operators obtained by the authors and their collaborators over the last decade. Its prime focus is on higher-dimensional Hardy operators that are based on the spherical average form.

The key motivation for this monograph is based on the fact that the Hardy operator is generally smaller than the Hardy–Littlewood maximal operator, which leads to, on the one hand, the operator norm of the Hardy operator itself being smaller than the latter. On the other hand, the former characterizing the weight function class or function spaces is greater than the latter.

READERSHIP

This book is suitable for undergraduate and graduate students as well as researchers in theoretical and applied mathematics. It will be a useful teaching material at seminars as well as an invaluable reference source in all science libraries.

CONTENTS

- Sharp Bounds for Hardy Operators on Lebesgue Spaces
- Hardy Operators on Other Function Spaces
- Weighted Inequalities for Hardy Type Operators
- Commutators of Hardy Operators
- Hardy Operators on Heisenberg Groups and p -Adic Fields
- Sharp Constants for Hausdorff q -Inequalities

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