

## Contents

Preface	vii
Self-Similar Measures for Quasicrystals <i>Michael Baake and Robert V. Moody</i>	1
Fourier Analysis of Deformed Model Sets <i>Guillaume Bernuau and Michel Duneau</i>	43
Mathematical Quasicrystals and the Problem of Diffraction <i>Jeffrey C. Lagarias</i>	61
Designer Quasicrystals: Cut-and-Project Sets with Pre-Assigned Properties <i>Peter A. B. Pleasants</i>	95
Generalized Model Sets and Dynamical Systems <i>Martin Schlottmann</i>	143
On Shelling Icosahedral Quasicrystals <i>Alfred Weiss</i>	161
Tilings, $C^*$ -algebras, and $K$ -theory <i>Johannes Kellendonk and Ian F. Putnam</i>	177
Hulls of Aperiodic Solids and Gap Labeling Theorems <i>J. Bellissard, D. J. L. Herrmann, and M. Zarrouati</i>	207
Quasicrystals, Parametric Density, and Wulff-Shape <i>Károly Böröczky, Jr., Uwe Schnell, and Jörg M. Wills</i>	259
Gordon-Type Arguments in the Spectral Theory of One-Dimensional Quasicrystals <i>David Damanik</i>	277
The Planar Dimer Model with Boundary: A Survey <i>Richard Kenyon</i>	307
Digit Tiling of Euclidean Space <i>Andrew Vince</i>	329
A Guide to Quasicrystal Literature <i>Michael Baake and Uwe Grimm</i>	371
Index	375