

Contents

Preface	ix
Why is the $3X + 1$ problem hard? ETHAN AKIN	1
Lectures on Cantor and Mycielski sets for dynamical systems ETHAN AKIN	21
Duality and the one sided ergodic Hilbert transform I. ASSANI	81
Rigidity conditions in topological dynamics related to a theorem of George Sell JOSEPH AUSLANDER AND KENNETH BERG	91
On strong laws of large numbers with rates GUY COHEN, ROGER L. JONES, AND M. LIN	101
Besicovitch weights and the necessity of duality restriction in the weighted ergodic theorem CIPRIAN DEMETER AND ROGER L. JONES	127
Strong sweeping out for lacunary sequences ROGER L. JONES	137
Some old and new Rokhlin towers ISAAC KORNFELD	145