

Contents

Preface	vii
Computing the Douady-Earle extension WILLIAM ABIKOFF AND TAIPING YE	1
Selected problems in Kleinian groups and hyperbolic geometry ARA BASMAJIAN	9
The law of the iterated logarithm for Kleinian groups CHRISTOPHER J. BISHOP AND PETER W. JONES	17
Weil-Petersson geometry and determinant bundles on inductive limits of moduli spaces INDRANIL BISWAS AND SUBHASHIS NAG	51
Iteration of mapping classes on a Bers slice: examples of algebraic and geometric limits of hyperbolic 3-manifolds JEFFREY F. BROCK	81
Lattice constants and a lemma of Zagier C. CAO, F. W. GEHRING, AND G. J. MARTIN	107
The quasi-Fuchsian space of four-punctured spheres YUNGYEN CHIANG	121
Approximating L^2 invariants of amenable covering spaces: A heat kernel approach JOZEF DODZIUK AND VARGHESE MATHAI	151
Random walks on circle packings TOMASZ DUBEJKO	169
Some maximal holomorphic motions CLIFFORD J. EARLE	183
Vector fields for holomorphic motions of closed sets CLIFFORD J. EARLE, FREDERICK P. GARDINER, AND NIKOLA LAKIC	193
Theta constant identities with applications to combinatorial number theory H. M. FARKAS AND I. KRA	227
The topology of real projective structures DANIEL M. GALLO	253

A discreteness condition for subgroups of $PSL(2, \mathbb{C})$ JANE GILMAN	261
On principally polarized abelian varieties and Riemann surfaces associated to prisms and pyramids VÍCTOR GONZÁLEZ-AGUILERA AND RUBÍ E. RODRÍGUEZ	269
Schur products of certain polynomials A. HINKKANEN	285
Inverse problems for fluid flows with a moving boundary YURI E. HOHLOV AND DMITRY Y. KLEINBOCK	297
On rigidity of one-dimensional maps YUNPING JIANG	319
Twist maps and Aubry-Mather sets Y. KATZNELSON AND D. S. ORNSTEIN	343
How to bend pairs of punctured tori LINDA KEEN AND CAROLINE SERIES	359
Lipman Bers, complex analyst I. KRA AND B. MASKIT	389
Strebel points NIKOLA LAKIC	417
Remarks on m -symmetric Riemann surfaces BERNARD MASKIT	433
Quasi-conformal mappings of Carnot-Caratheodory spaces G. D. MOSTOW	447
Lipman Bers and partial differential equations LOUIS NIRENBERG	455
Irrational rotations DAVID J. PINCHBECK	463
μ -homeomorphisms URI SREBRO AND EDUARD YAKUBOV	473