

Contents

Preface	vii
Hecke grids and congruences for weakly holomorphic modular forms SCOTT AHLGREN and NICKOLAS ANDERSEN	1
Knots and q -series GEORGE E. ANDREWS	17
A partition inequality involving products of two q -Pochhammer symbols ALEXANDER BERKOVICH and KEITH GRIZZELL	25
Analogues of Koshliakov's Formula BRUCE C. BERNDT, SUN KIM, and ALEXANDRU ZAHARESCU	41
How to prove Ramanujan's q -continued fractions GAURAV BHATNAGAR	49
A nonsingular Z_3 curve of genus 4 H. M. FARKAS, J. Y. KAMINSKI, and E. YAKUBOV	69
Ramanujan's radial limits AMANDA FOLSOM, KEN ONO, and ROBERT C. RHOADES	91
An identity that may have changed the course of history MICHAEL D. HIRSCHHORN	103
The major index generating function of standard Young tableaux of shapes of the form "staircase minus rectangle" C. KRATTENTHALER and M. J. SCHLOSSER	111
Convergence of random continued fractions LISA LORENTZEN	123
Tensor product decomposition of $\widehat{\mathfrak{sl}}(n)$ modules and identities KAILASH C. MISRA and EVAN A. WILSON	131
Ramanujan, Robin, highly composite numbers, and the Riemann Hypothesis JEAN-LOUIS NICOLAS and JONATHAN SONDOW	145
A quaternionic proof of the representation formulas of two quaternary quadratic forms CHERNG-TIAO PERNG	157