

Contents

Preface	vii
List of Participants	xiii
An invitation to toric topology: Vertex four of a remarkable tetrahedron VICTOR M. BUCHSTABER AND NIGEL RAY	1
Cohomological aspects of torus actions CHRISTOPHER ALLDAY	29
A counterexample to a conjecture of Bosio and Meersseman DAVID ALLEN AND JOSÉ LA LUZ	37
Symplectic quasi-states and semi-simplicity of quantum homology MICHAEL ENTOV AND LEONID POLTEROVICH	47
Miraculous cancellation and Pick's theorem K. E. FELDMAN	71
Freeness of equivariant cohomology and mutants of compactified representations MATTHIAS FRANZ AND VOLKER PUPPE	87
Weighted hyperprojective spaces and homotopy invariance in orbifold cohomology REBECCA GOLDIN	99
Homotopy theory and the complement of a coordinate subspace arrangement JELENA GRBIĆ	111
The quantization of a toric manifold is given by the integer lattice points in the moment polytope MARK D. HAMILTON	131
Invariance property of orbifold elliptic genus for multi-fans AKIO HATTORI	141
Act globally, compute locally: group actions, fixed points, and localization TARA S. HOLM	179
Tropical toric geometry TAKESHI KAJIWARA	197
The symplectic volume and intersection pairings of the moduli spaces of spatial polygons YASUHIKO KAMIYAMA	209

Logarithmic functional and reciprocity laws ASKOLD KHOVANSKII	221
Orbifold cohomology reloaded TAKASHI KIMURA	231
The geometry of toric hyperkähler varieties HIROSHI KONNO	241
Graphs of 2-torus actions ZHI LÜ	261
Classification problems of toric manifolds via topology MIKIYA MASUDA AND DONG YOUP SUH	273
The quasi KO -types of certain toric manifolds YASUZO NISHIMURA	287
Categorical aspects of toric topology TARAS E. PANOV AND NIGEL RAY	293
A survey of hypertoric geometry and topology NICHOLAS J. PROUDFOOT	323
On asymptotic partition functions for root systems TATSURU TAKAKURA	339
Torus actions of complexity one DMITRI TIMASHEV	349
Permutation actions on equivariant cohomology of flag varieties JULIANNA S. TYMOCZKO	365
K -theory of torus manifolds V. UMA	385
On liftings of local torus actions to fiber bundles TAKAHIKO YOSHIDA	391