

Contents

Preface	vii
The Hyamfest	ix
Courses at the Hyamfest	xi
Talks at the Hyamfest	xiii
List of Participants	xv
Biographical Sketch of Hyam Rubinstein	xxi

Survey and Expository Papers

What is an Almost Normal Surface? JOEL HASS	1
The Ergodic Theory of Hyperbolic Groups DANNY CALEGARI	15
Mapping Class Groups of 3-Manifolds, Then and Now SUNGBOK HONG AND DARRYL MCCULLOUGH	53
Stacks of Hyperbolic Spaces and Ends of 3-Manifolds B. H. BOWDITCH	65
Harmonic Maps and Integrable Systems EMMA CARBERRY	139
Some of Hyam's Favourite Problems HYAM RUBINSTEIN	165

Research Papers

Almost Normal Surfaces with Boundary DAVID BACHMAN, RYAN DERBY-TALBOT, and ERIC SEDGWICK	177
Computational Topology with Regina: Algorithms, Heuristics and Implementations BENJAMIN A. BURTON	195
Left-Orderability and Exceptional Dehn Surgery on Two-Bridge Knots ADAM CLAY and MASAKAZU TERAGAITO	225

Networking Seifert Surgeries on Knots IV: Seiferters and Branched Coverings ARNAUD DERUELLE, MARIO EUDAVE-MUÑOZ, KATURA MIYAZAKI, and KIMIHIKO MOTEGI	235
Commensurability of Knots and L^2 -Invariants STEFAN FRIEDL	263
The Groups of Fibred 2-Knots JONATHAN A. HILLMAN	281
On the Number of Hyperbolic 3-Manifolds of a Given Volume CRAIG HODGSON and HIDETOSHI MASAI	295
Seifert Fibered Surgery and Rasmussen Invariant KAZUHIRO ICHIHARA and IN DAE JONG	321
Existence of Spherical Angle Structures on 3-Manifolds FENG LUO	337
3-Manifolds with Heegaard Splittings of Distance Two J. HYAM RUBINSTEIN and ABIGAIL THOMPSON	341
Generating the Genus $g + 1$ Goeritz Group of a Genus g Handlebody MARTIN SCHARLEMANN	347