

Contents

| | |
|---|------------|
| Preface | vii |
| Introduction | ix |
| Summaries of the Papers | xv |
| | |
| Complex Singularities | |
| Singularities Arising from Lattice Polytopes | 1 |
| K. ALTMANN | |
| Critical Points of Affine Multiforms on the Complements of Arrangements | 25 |
| J.N. DAMON | |
| Strange Duality, Mirror Symmetry and the Leech Lattice | 55 |
| W. EBELING | |
| Geometry of Equisingular Families of Curves | 79 |
| G-M. GREUEL AND E. SHUSTIN | |
| Arrangements, KZ Systems and Lie Algebra Homology | 109 |
| E.J.N. LOOIJENGA | |
| The Signature of $f(x, y) + z^N$ | 131 |
| A. NEMETHI | |
| Spectra of \mathcal{K} -Unimodal Isolated Singularities of Complete Intersections | 151 |
| J.M. STEENBRINK | |
| Dynkin Graphs, Gabriélov Graphs and Triangle Singularities | 163 |
| T. URABE | |
| | |
| Stratifications and Equisingularity Theory | |
| Differential Forms on Singular Varieties and Cyclic Homology | 175 |
| J.P. BRASSELET AND Y. LEGRAND | |
| Continuous Controlled Vector fields | 189 |
| A.A. DU PLESSIS | |
| Finiteness of Mather's Canonical Stratification | 199 |
| A.A. DU PLESSIS | |

| | |
|--|-----|
| Trends in Equisingularity Theory T.J. GAFFNEY AND D. MASSEY | 207 |
| Regularity at Infinity of Real and Complex Polynomial Functions M. TIBAR | 249 |
| Global Singularity Theory | |
| A Bennequin Number Estimate for Transverse Knots V.V. GORYUNOV AND J.W. HILL | 265 |
| Abelian Branched Covers of the Projective Plane A. LIBGOBER | 281 |
| Elimination of Singularities: Thom Polynomials and Beyond O. SAEKI AND K. SAKUMA | 291 |
| Singularities of Mappings | |
| An Introduction to the Image-Computing Spectral Sequence K.A. HOUSTON | 305 |
| On the Classification and Geometry of Corank-1 Map-Germs from Three-Space to Four-Space K.A. HOUSTON AND N.P. KIRK | 325 |
| Multiplicities of Zero-Schemes in Quasihomogeneous Corank-1 Singularities $\mathbb{C}^n \rightarrow \mathbb{C}^n$ W.L. MARAR, J.A. MONTALDI AND M.A.S. RUAS | 353 |
| Butterflies and Umbilics of Stable Perturbations of Analytic Map-Germs $(\mathbb{C}^5, 0) \rightarrow (\mathbb{C}^4, 0)$ T. FUKUI | 369 |
| Applications of Singularity Theory | |
| Singular Phenomena in Kinematics P.S. DONELAN AND C.G. GIBSON | 379 |
| Singularities of Developable Surfaces G. ISHIKAWA | 403 |
| Singularities of Solutions of First Order Partial Differential Equations S. IZUMIYA | 419 |