

CONTENTS

Participants	vii
Contributors	ix
Introduction	xi
Distribution of rational points and Kodaira dimension of fiber products <i>L. Caporaso</i>	1
How many rational points can a curve have? <i>L. Caporaso, J. Harris, B. Mazur</i>	13
Quantum cohomology of rational surfaces <i>B. Crauder, R. Miranda</i>	33
Quantum intersection rings <i>P. Di Francesco, C. Itzykson</i>	81
Mirror symmetry and elliptic curves <i>R. Dijkgraaf</i>	149
A generalized Jacobi theta function and quasimodular forms <i>M. Kaneko, D. Zagier</i>	165
Boundary behaviour of Hurwitz schemes <i>T. Ekedahl</i>	173
Operads and moduli spaces of genus 0 Riemann surfaces <i>E. Getzler</i>	199
Resolution of diagonals and moduli spaces <i>V. Ginzburg</i>	231
The Chow ring of the moduli space of curves of genus 5 <i>E. Izadi</i>	267
The cohomology of algebras over moduli spaces <i>T. Kimura, A.A. Voronov</i>	305
Enumeration of rational curves via torus actions <i>M. Kontsevich</i>	335

Cellular decompositions of compactified moduli spaces of pointed curves <i>E. Looijenga</i>	369
Generating functions in algebraic geometry and sums over trees <i>Yu.I. Manin</i>	401
Holomorphicity and non-holomorphicity in $N = 2$ supersymmetric field theories <i>H. Ooguri</i>	419
An arithmetic problem in surface geometry <i>R. Penner</i>	427
An orbifold partition of $\overline{\mathcal{M}}_g^n$ <i>M. Pikaart</i>	467
Moduli of curves with non-abelian level structure <i>M. Pikaart, A.J. de Jong</i>	483
\mathbb{Q} -structure of conformal field theory with gauge symmetries <i>K. Ueno</i>	511
On the cohomology of moduli spaces of rank two vector bundles over curves <i>D. Zagier</i>	533