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Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	""Contents""; ""Introduction""; ""List of Participants""; ""Hilbert's tenth problem: What was done and what is to be done""; ""Undecidability of existential theories of rings and fields: A survey""; ""1. Introduction""; ""2. The existential theory of rational function fields""; ""3. The existential theory of algebraic function fields""; ""4. A geometric analogue of Hilbert's Tenth Problem""; ""5. Decision problems concerning rings of analytic functions: introduction""; ""6. First-order theories of rings of analytic functions"" ""7. Existential decidability and the Approximation Property for rings of analytic functions""""8. Existential undecidability for rings of analytic functions""; ""9. Polynomial rings and p-adic entire functions""; ""10. Existential theories of fields of meromorphic functions""; ""11. Variations: Languages with predicates for symmetric functions""; ""Appendix A. Elliptic curves: Basic Definitions""; ""Appendix B. Elliptic curves over function fields""; ""Appendix C. Pell equations""; ""References""; ""Hilbert's tenth problem over number fields, a survey"";

""Defining constant polynomials""

""Decidability and local-global principles""""Applications of local-global principles to arithmetic and geometry""; ""Regularly T-closed fields"";

""Skolem density problems over large Galois extensions of global fields""; ""An effort to prove that the existential theory of \mathbb{Q} is

undecidable""; ""Topology of diophantine sets: Remarks on Mazur's conjectures""; ""Diagonal quadratic forms and Hilbert's tenth problem"";

""Algebraic geometry over four rings and the frontier to tractability"";

""1. Introduction""; ""2. Computing Complex Dimension Faster""

""3. Polytope Volumes and Counting Pieces of Semi-Algebraic Sets""""4.

The Generalized Riemann Hypothesis and Detecting Rational Points"";

""5. Effective Siegel Versus Detecting Integral Points on Surfaces""; ""6.

Proofs of Our Main Technical Results""; ""7. Acknowledgements"";

""Appendix: How the Examples Were Computed""; ""References"";

""Some model theory of compact complex spaces""; ""Double coset

decompositions for algebraic groups over $K[t]$ ""; ""Zero estimates for

polynomials in 3 and 4 variables using orbits and stabilisers""
