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Nota di contenuto	<p>""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""</p> <p>""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"";</p> <p>""Appendix A. Elliptic curves: Basic Definitions""; ""Appendix B. Elliptic curves over function fields""; ""Appendix C. Pell equations"";</p> <p>""References""; ""Hilbert's tenth problem over number fields, a survey""; ""Defining constant polynomials""</p>

""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 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"";
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