1. Record Nr. UNISA996466379503316

Titolo	Introduction to Algebraic Independence Theory [[electronic resource] /] / edited by Yuri V. Nesterenko, Patrice Philippon
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2001
ISBN	3-540-44550-1
Edizione	[1st ed. 2001.]
Descrizione fisica	1 online resource (XVI, 260 p.)
Collana	Lecture Notes in Mathematics, , 0075-8434 ; ; 1752
Disciplina	512/.73
Soggetti	Number theory Algebraic geometry Number Theory Algebraic Geometry
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	?(?, z) and Transcendence -- Mahler's conjecture and other transcendence Results -- Algebraic independence for values of Ramanujan Functions -- Some remarks on proofs of algebraic independence -- Elimination multihomogene -- Diophantine geometry -- Géométrie diophantienne multiprojective -- Criteria for algebraic independence -- Upper bounds for (geometric) Hilbert functions -- Multiplicity estimates for solutions of algebraic differential equations -- Zero Estimates on Commutative Algebraic Groups -- Measures of algebraic independence for Mahler functions -- Algebraic Independence in Algebraic Groups. Part 1: Small Transcendence Degrees -- Algebraic Independence in Algebraic Groups. Part II: Large Transcendence Degrees -- Some metric results in Transcendental Numbers Theory -- The Hilbert Nullstellensatz, Inequalities for Polynomials, and Algebraic Independence.
Sommario/riassunto	In the last five years there has been very significant progress in the development of transcendence theory. A new approach to the arithmetic properties of values of modular forms and theta-functions was found. The solution of the Mahler-Manin problem on values of modular function j(tau) and algebraic independence of numbers pi and e^(pi) are most impressive results of this breakthrough. The book

presents these and other results on algebraic independence of numbers and further, a detailed exposition of methods created in last the 25 years, during which commutative algebra and algebraic geometry exerted strong catalytic influence on the development of the subject.