

1. Record Nr.	UNINA9910806857203321
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Titolo	An elementary recursive bound for effective positivstellensatz and Hilbert's 17th problem // Henri Lombardi, Daniel Perrucci, Marie-Francoise Roy
Pubbl/distr/stampa	Providence, Rhode Island : , : American Mathematical Society, , 2020
ISBN	1-4704-5662-1
Descrizione fisica	1 online resource (138 pages)
Collana	Memoirs of the American Mathematical Society ; ; Volume 263
Classificazione	12D1514P9913J30
Disciplina	512.9422
Soggetti	Polynomials Algebraic fields Recursive functions
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Weak inference and weak existence -- Intermediate value theorem -- Fundamental theorem of algebra -- Hermite's theory -- Elimination of one variable -- Proof of the main theorems -- Annex.
Sommario/riassunto	"We prove an elementary recursive bound on the degrees for Hilbert's 17th problem. More precisely we express a nonnegative polynomial as a sum of squares of rational functions, and we obtain as degree estimates for the numerators and denominators the following tower of five exponentials $2^{2d}4^k$ where d is the degree and k is the number of variables of the input polynomial. Our method is based on the proof of an elementary recursive bound on the degrees for Stengle's Positivstellensatz. More precisely we give an algebraic certificate of the emptiness of the realization of a system of sign conditions and we obtain as degree bounds for this certificate a tower of five exponentials, namely $2^{2(2\max\{2,d\}4k+s2k\max\{2,d\}16k\text{bit}(d))}$ where d is a bound on the degrees, s is the number of polynomials and k is the number of variables of the input polynomials--