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Autore	Lombardi Henri
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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--