SUMS OF SQUARES AND VARIETIES OF MINIMAL DEGREE.

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Abstract: *I will explain and draw connections between the following two theorems: (1) Hilbert's theorem on nonnegative polynomials and sums of squares, and (2) Classification of varieties of minimal degree by Del Pezzo and Bertini. This will result in the classification of all varieties on which nonnegative polynomials are equal to sums of squares. (Joint work with Greg Smith and Mauricio Velasco)*