COMPLEX ANALYSIS SEMINAR

COMPLEX VARIABLE ANALOGUES OF HILBERT'S 17th PROBLEM

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ABSTRACT: Hilbert's 17th problem, solved affirmatively by Artin in 1925, asks whether a nonnegative polynomial in several real variables is necessarily a sum of squares of rational functions. In this talk I describe several analogues for Hermitian symmetric polynomials. Proof techniques use the Bergman projection and simple facts about compact operators. If time permits I will give some applications to CR Geometry.

Date: Thursday, April 22, 2010

Time: 4pm-5pm

Place: UH 4010

Webpage: `http://math.utoledo.edu/~sonmez/complexseminar.html`