

# Pumagrass

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**Speaker:** Anlong Chua

**Title:** Positive polynomials and sums of squares

## Abstract

Is a positive (real) polynomial necessarily a sum of squares? The answer, given by Emil Artin in 1927, illustrates a surprising connection between logic and algebra. I will attempt to explain this concept and its generalization to the Positivstellensatz, which can be viewed as a real analogue of the famous Nullstellensatz.