Mathematics, Statistics, and Computer Science   **@ UIC**

Algebraic Geometry Seminar

The Weak Bounded Negativity Conjecture

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Abstract: In this talk I will give a proof of the Weak Bounded Negativity Conjecture, which says that given any complex smooth projective surface, for any reduced curve C in X and integer g, assume that the geometric genus of each component of C is bounded from above by g, then the self-intersection number C^2 is bounded from below. The Weak Bounded Negativity Conjecture is motivated by the old folklore Bounded Negativity conjecture, which says that given any complex smooth projective surface, the self-intersection number of any reduced curve is bounded from below. Also, the Bounded Negativity Conjecture has an interesting relation with the Nagata conjecture. I will introduce those background before the proof of the Weak Bounded Negativity Conjecture. Also, I will give some further thoughts towards the Bounded Negativity Conjecture.

Wednesday, October 11 at 4:00 PM in SEO 427