Graduate Algebraic Geometry Seminar

Seshadri Constants on Algebraic Surfaces

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Abstract: The theory of Seshadri constants originates with Demailly's idea for quantifying how much of the positivity of an ample line bundle can be localized at a given point of a variety. First, I will talk about a theorem of Ein and Lazarsfeld, which gives a universal lower bound of Seshadri constants at a very general point of smooth complex projective surfaces. Then I will introduce Miranda's example, which illustrates that there cannot exist lower bounds on Seshadri constants holding at every point of every surface. At last, I will discuss a generalized version of Miranda's example constructed by Bauer.

Wednesday, November 6 at 5:00 PM in 712 SEO