Algebraic Geometry Seminar

The J-equation, algebro-geometric stability and mirror symmetry.

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Abstract: I will discuss the solvability of the J-equation, which defines the critical point of Chen-Donaldson’s J-functional. It is known that there do not exist solutions to the J-equation in general – a notion of algebro-geometric stability has been proposed by Lejmi-Szekelyhidi which is conjectured to be equivalent to the existence of solutions. I will discuss a proof of this conjecture on toric varieties, together with some motivating connections with mirror symmetry and Bridgeland stability. This talk is based on joint with G. Szekelyhidi, and A. Jacob and S.-T. Yau.

Wednesday, November 1 at 4:00 PM in SEO 427