

BOSTON UNIVERSITY GEOMETRY AND PHYSICS SEMINAR

**THE J -EQUATION, ALGEBRO-GEOMETRIC
STABILITY AND MIRROR SYMMETRY.**

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September 27, 2017, 4:00 – 5:00pm
Math/Computer Science, Room 148
111 Cummington Street, Boston

Tea: 3:45pm in Room 144

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 work with G. Székelyhidi, and A. Jacob and S.-T. Yau.

See <http://math.bu.edu/research/geom/seminar.html> or contact Yoosik Kim (yoosik@bu.edu) or Siu-Cheong Lau (lau@math.bu.edu) for more information.