

BOSTON UNIVERSITY GEOMETRY AND PHYSICS SEMINAR

## THE J-EQUATION, DHYM EQUATION, AND CSCK METRICS

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Zoom link:

<https://bostonu.zoom.us/j/98424846618?pwd=dVF2U0h2NjgxVDI5WjcxUkNUblFQQT09>

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**Abstract:** The deformed Hermitian-Yang-Mills (dHYM) equation is the mirror equation for the special Lagrangian equation. The "small radius limit" of the dHYM equation is the J-equation, which is closely related to the constant scalar curvature Kähler (cscK) metrics. In this talk, I will explain my recent result that the solvability of the J-equation is equivalent to a notion of stability. I will also explain my similar result on the supercritical dHYM equation as well as the application of my results to the cscK problem.

See <http://math.bu.edu/research/geom/seminar.html> or contact Yu-Shen Lin ([yslin@bu.edu](mailto:yslin@bu.edu)) or Siu-Cheong Lau ([lau@math.bu.edu](mailto:lau@math.bu.edu)) for more information.