

BOSTON UNIVERSITY GEOMETRY AND PHYSICS SEMINAR

OPEN QUANTUM KIRWAN MAP AND BULK DEFORMATION

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March 21, 2018, 4:00 – 5:00pm
Math/Computer Science, Room 148
111 Cummington Street, Boston

Tea: 3:45pm in Room 144

Abstract: (Joint work with Chris Woodward) Consider a Lagrangian submanifold \bar{L} in a GIT quotient $\bar{X} = X//G$. Besides the usual Fukaya A_∞ algebra $Fuk(\bar{L})$ defined by counting holomorphic disks, another version, called the quasimap Fukaya algebra $Fuk^K(L)$, is defined by counting holomorphic disks in X modulo group action. Motivated from the closed string quantum Kirwan map studied by Ziltener and Woodward, as well as the work of Fukaya–Oh–Ohta–Ono, Chan–Lau–Leung–Tseng, we construct an open string version of the quantum Kirwan map. This is an A_∞ morphism from $Fuk^K(L)$ to a bulk deformation of $Fuk(\bar{L})$. I will explain the basic construction and the bulk-deformed version of the open quantum Kirwan map.

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.