BOSTON UNIVERSITY GEOMETRY AND PHYSICS SEMINAR

CLASSICAL AND QUANTUM GEOMETRY OF MOMENT MAPS

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Abstract: Let X be a Fano variety with G action. The quantum GIT conjecture predicts a formula for the quantum cohomology of "anti-canonical" GIT quotients X//G in terms of the equivariant quantum cohomology of X. The formula is motivated by ideas from 3- dimensional gauge theory ("Coulomb branches") and provides a vast generalization of Batyrev's formula for the quantum cohomology of a toric Fano variety. I will explain describe our ongoing work with C. Teleman proving this conjecture. The strategy of proof involves ideas from Hamiltonian Floer theory. Along the way, I will also explain a new integral generalization of the classical Kirwan surjectivity theorem.

See `http://math.bu.edu/research/geom/seminar.html` or contact Siu-Cheong Lau (*scllouis@bu.edu*) or Brian Williams (*bwill22@bu.edu*) for more information.