BOSTON UNIVERSITY GEOMETRY AND PHYSICS SEMINAR

WITTEN-MORSE THEORY REVISITED

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Institute of Mathematical Sciences

The Chinese University of Hong Kong

September 30, 2015, 4:00 – 5:00pm

Math/Computer Science, Room 148

111 Cummington Street, Boston

Tea: 3:45pm in Room 144

Abstract: Witten interpreted Morse theory as a limit of twisted Hodge theory. This idea leads to the developments of Chern-Simons-Floer theory for three manifolds and Lagrangian-Floer theory for symplectic manifolds. We study the limit of algebra structure on the twisted deRham complex and show that its limit is the A_∞ structure on the Morse category. If time permits, I will explain applications to mirror symmetry.

See `http://math.bu.edu/research/geom/seminar.html` or contact Siu Cheong Lau *lau@math.bu.edu* for more information.