BOSTON UNIVERSITY GEOMETRY AND PHYSICS SEMINAR

DERIVED SYMPLECTIC GEOMETRY FOR CLASSICAL FIELD THEORY

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October 18, 2017, 4:00 – 5:00pm Math/Computer Science, Room 148 111 Cummington Street, Boston

Tea: 3:45pm in Room 144

Abstract: One can study a class of classical field theories in a purely algebraic manner, thanks to the recent development of derived symplectic geometry. After reviewing the basics of derived symplectic geometry, I will discuss some interesting examples of classical field theories, including B-model, Chern-Simons theory, and Kapustin-Witten theory; here Kapustin-Witten theory is of interest for the geometric Langlands correspondence and my current understanding of it is mostly based on a joint work with Chris Elliott. Time permitting, I will mention a few different research directions I have taken along the line of understanding instances of Langlands duality.

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.