

BOSTON UNIVERSITY GEOMETRY AND PHYSICS SEMINAR

INDEX THEOREMS FOR B-TWISTED LANDAU-GINZBURG ORIENTIFOLDS.

Matt Young
Chinese University of Hong Kong

January 24, 2018, 4:00 – 5:00pm
Math/Computer Science, Room 148
111 Cummington Street, Boston

Tea: 3:45pm in Room 144

Abstract: Following predictions arising from the physics of B-twisted Landau-Ginzburg models, the work of a number of mathematicians has established that matrix factorization categories define two dimensional oriented topological field theories. In this talk I'll describe an unoriented (or orientifold) variant of this construction. One of the key tasks is to prove a Lefschetz-type index theorem for matrix factorizations. I'll explain a proof of this theorem and discuss some its generalizations. Partially based on joint work with Roland Abuaf.

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.