BOSTON UNIVERSITY GEOMETRY AND PHYSICS SEMINAR

HAMILTONIAN AND LAGRANGIAN PERSPECTIVES ON ELLIPTIC COHOMOLOGY

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April 19, 2017, 4:00 – 5:00pm
Math/Computer Science, Room 148
111 Cummington Street, Boston

Tea: 3:45pm in Room 144

Abstract: The physics proof of the Atiyah–Singer index theorem comes from equating the Hamiltonian and Lagrangian quantizations of supersymmetric mechanics. Similar ideas applied to the supersymmetric sigma model construct two versions of elliptic cohomology: elliptic cohomology at the Tate curve over the integers and the universal elliptic cohomology theory over the complex numbers. Quantization procedures give analytic constructions of wrong-way maps in these cohomology theories. Relating these to the Ando–Hopkins–Strickland–Rezk string orientation of topological modular forms reveals torsion invariants associated with these sigma models.

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