

Northeastern University



Mathematics Department

Geometry, Physics, and Representation Theory Seminar

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Thursday, March 12, 2:50-3:50 pm, Lake Hall 509

Generalizing the Strange Duality for K3 surfaces

Abstract

The Strange Duality conjecture suggests that there should be a natural duality between cohomologies of certain tautological bundles on a pair of moduli spaces of stable sheaves coming from two orthogonal Chern characters. In this talk, I will formulate the conjecture more precisely, briefly review the recent result of Marian-Oprea establishing the Strange Duality over elliptic K3 surfaces, and formulate our pointwise generalization. Time permitting, I will outline the formulation of the result in moduli (over the moduli stack of (quasi)polarized K3s) and explain how to extend the result from the elliptic locus.