Felix Klein Seminar

UNIVERSITY OF NOTRE DAME
Department of Mathematics

Speaker: Emanuel Diaconescu
Department of Physics, Rutgers University

Thursday, March 5, 2015
2:00 PM
125 Hayes-Healy Hall

Title: Parabolic refined invariants and Macdonald polynomials

Abstract:

The string theoretic construction explained in the previous lecture is extended to character varieties with tame ramification. This yields a string theoretic derivation of a conjecture of Letellier, Hausel and Rodriguez-Villegas via Donaldson-Thomas invariants of Calabi-Yau orbifolds. This framework also yields natural explanation for the presence of Macdonald polynomials realizing Haiman's construction through geometric engineering. Based on work with W.-y. Chuang, R. Donagi and T. Pantev.