

BOSTON UNIVERSITY GEOMETRY AND PHYSICS SEMINAR

SYZ MIRROR SYMMETRY FOR HYPERTORIC VARIETIES

Xiao Zheng
Boston University

April 18, 2018, 4:00 – 5:00pm
Math/Computer Science, Room 148
111 Cummington Street, Boston

Tea: 3:45pm in Room 144

Abstract: Hypertoric varieties are hyperkahler analogue of toric varieties introduced by Bielawski and Dancer. Typical examples of hypertoric varieties include T^*P^n and crepant resolution of A_n singularities. In this talk, I will explain how to construct Lagrangian torus fibrations on smooth hypertoric varieties and corresponding SYZ mirror varieties using T-duality and generating functions of open Gromov-Witten invariants. The mirrors obtained via this method is affine and often singular. We resolve the singularity by hand using the wall and chamber structure of the SYZ base. This corresponds to Floer-theoretical gluing between moduli spaces of Lagrangian immersions in the work of Cho, Hong and Lau. This is a joint work with Siu-Cheong Lau.

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.