BOSTON UNIVERSITY GEOMETRY AND PHYSICS SEMINAR

LAGRANGIAN SUBMANIFOLDS IN ALMOST TORIC FIBRATIONS

Jeff Hicks
Cambridge University

Nov 18, 2020, 4-5pm
Zoom link:
https://bostonu.zoom.us/j/97456419902?pwd=Vk5hdGQ0dlgwTXZkZ1hRUHM0WndqZz09
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Abstract: Mirror symmetry predicts that Lagrangian submanifolds of a symplectic space X are mirror to coherent sheaves on a "mirror space" Y. A proposed mechanism for mirror symmetry comes from almost Lagrangian torus fibrations. In this framework, X and Y are dual Lagrangian torus fibrations over a common affine base Q. Mirror symmetry arises by degenerating the symplectic geometry of X and complex geometry of Y to tropical geometry on the base Q. We will look at the setting where X is the complement of the elliptic curve in the projective plane, and discuss how to construct Lagrangian submanifolds of X from the data of tropical curves in the base of the fibration.

See `http://math.bu.edu/research/geom/seminar.html` or contact Yu-Shen Lin (*yslin@bu.edu*) or Siu-Cheong Lau (*lau@math.bu.edu*) for more information.