BOSTON UNIVERSITY GEOMETRY AND PHYSICS SEMINAR

FUNCTORIAL MIRROR SYMMETRY FOR VERY AFFINE HYPERSURFACES

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Tea: 3:45pm in Room 365

Abstract: Even though the algebraic geometry of toric varieties is well-understood, translating it under mirror symmetry into the symplectic geometry of very affine hypersurfaces (hypersurfaces in a complex torus) yields surprising new results in algebraic geometry. A very affine hypersurface and its complement (also a very affine hypersurface) have several natural symplectic operations relating them, as observed by Auroux. Even a seemingly trivial operation in symplectic geometry leads us from toric algebraic geometry into the world of derived schemes. I'll explain how this appears in joint work with Benjamin Gammage where we prove Auroux's conjectures about functorial mirror symmetry for the toric analogs of these symplectic operations.

See `http://math.bu.edu/research/geom/seminar.html` or contact Yu-Shen Lin (*yslin@bu.edu*) or Brian Williams (*bwill22@bu.edu*) for more information.