

BOSTON UNIVERSITY GEOMETRY AND PHYSICS SEMINAR

**SYMPLECTOMORPHISMS MIRROR TO
BIRATIONAL TRANSFORMATIONS OF THE
PROJECTIVE PLANE**

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CCDS 365, Apr 19, 2023, 4-5pm

Tea: 3:45pm in Room 365

Abstract: We construct a non-finite type four-dimensional Weinstein domain M_{univ} and describe a HMS correspondence between distinguished birational transformations of the projective plane preserving a standard holomorphic volume form and symplectomorphisms of M_{univ} . The space M_{univ} is universal in the sense that it contains every Liouville manifold mirror to a log Calabi-Yau surface as a Weinstein subdomain; after restricting to these subdomains, we recover a mirror correspondence between the automorphism group of any open log Calabi-Yau surface and the symplectomorphism group of its mirror. This is joint work with Ailsa Keating.

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.