

BOSTON UNIVERSITY GEOMETRY SEMINAR

Poisson traces on symmetric powers of symplectic varieties.

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Wednesday Nov. 16, 4-5 pm in MCS B21.
Tea 3:45-4 in MCS 144.

Abstract: A Poisson trace on a symplectic variety Y is an algebraic distribution on Y which is invariant under Hamiltonian vector fields. I will show that for any affine n -dimensional symplectic variety X , the direct sum of the spaces of Poisson traces on all the symmetric powers of X is a polynomial algebra, generated by $H_n(X)$ sitting in degrees 1,2,3,... I will also discuss Poisson traces on symmetric powers of some singular Poisson varieties. This is joint work with Travis Schedler.