

Stanford Algebraic Geometry — Seminar —

LINEAR SERIES ON MODULI SPACES OF VECTOR BUNDLES ON CURVES

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Abstract

The moduli spaces of semistable vector bundles on curves have special effective divisors called generalized theta divisors, analogous to the classical theta divisor on a Jacobian. They live in all the linear series on these moduli spaces and are conjectured to determine them, in a suitable sense. In this talk I will give a survey of recent techniques I used towards a better understanding of these divisors, in particular for giving effective global generation and very ampleness results for their multiples. These techniques are of two main kinds: on one hand a careful study of Quot schemes using moduli spaces of stable maps, and on the other hand Fourier-Mukai methods in the study of coherent sheaves on abelian varieties.

Friday, November 11

3:15 p.m.

Room 383-N

<http://math.stanford.edu/~vakil/s0506/>