

1041-14-277

Dennis S. Keeler* (keelerds@muohio.edu), Dept of Mathematics and Statistics, Miami University, Oxford, OH 45056. *Fujita's Conjecture and Frobenius amplitude.*

Fujita's Conjecture is an open question regarding the global generation of certain line bundles. Using methods related to noncommutative algebraic geometry, we prove a version of Fujita's Conjecture in arbitrary characteristic, generalizing results of K.E. Smith. We obtain versions of Fujita's Conjecture for coherent sheaves with certain ampleness properties. A weaker definition of an ample sequence of coherent sheaves will also be discussed. (Received August 12, 2008)