

1019-13-179

Sandra M Spiroff* (spiroffs@seattleu.edu), 901 12th Avenue, P.O. Box 222000, Seattle, WA 98122, and **Paul C Roberts** (roberts@math.utah.edu), 155 South 1400 East, Salt Lake City, UT 84112. *The commutativity of intersection with divisors*. Preliminary report.

Let A be a Noetherian normal domain and f a non-zero non-unit of A . Intersection with the divisor (f) gives a map from the Chow group of A to the Chow group of the hypersurface determined by f . Using methods of algebraic geometry, it has been proven that intersection with divisors is commutative up to rational equivalence. In order to better understand the algebra behind this construction, we seek a proof using purely algebraic means. The case where the divisors intersect in codimension 2 is straightforward, but when they intersect in codimension 1 the result is not so clear. We present our progress in this case. This is joint work with Paul Roberts. (Received August 14, 2006)