

1035-13-1408

Paul Roberts and **Sandra Spiroff*** (spiroffs@seattleu.edu), 901 12th Avenue, P.O. Box 222000, Seattle, WA 98122. *Commutativity of Intersection with Divisors.*

One of the fundamental facts of Intersection Theory is the commutativity of intersection with divisors. When the intersection is proper, this concept is quite simple. Otherwise, the situation is considerably more complicated. A classical proof uses a “moving lemma” to move the divisor so that the intersection is proper, and a newer method, introduced by W. Fulton, uses a theory of “pseudo-divisors”. However, there has been no proof of the crucial property that this operation is commutative that did not involve a considerable amount of machinery from Algebraic Geometry. We give a purely algebraic proof of the commutativity of intersection with divisors. (Received September 19, 2007)