

1023-14-952

David A. Cox* (dac@cs.amherst.edu), Department of Mathematics & Computer Science,
Amherst College, Amherst, MA 01002. *The Rees Algebra and the Moving Curve Ideal.*

The method of moving curves was introduced by Sederberg and Chen in 1995 and has been used to solve the implicitization problem. When one considers all moving curves that follow a given a parametrization, one gets the "moving curve ideal". This ideal is of great interest in commutative algebra, where it is called the "ideal of relations defining the Rees algebra". This talk will discuss two aspects of this ideal. First, for certain degree four parametrizations, I can give explicit generators of this ideal. Second, I will describe an unexpected relation between this ideal and the classical theory of adjoint curves. (Received September 23, 2006)