

DEFINING IDEALS OF REES ALGEBRAS AND SPECIAL FIBER RINGS

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ABSTRACT. Rees algebras have been studied intensively in both commutative algebra and algebraic geometry. One of the questions that has not been well understood is their defining ideals. For instance, generating degrees of defining ideals of Rees algebras of homogeneous ideals in $k[x, y]$, where k is a field, is not known in general. In this talk, we present a result on defining ideals of Rees algebras of certain codimension 2 perfect ideals. This is joint work with Vivek Mukundan.