THE STRUCTURE OF SALLY MODULES AND BUCHSBAUMNESS OF ASSOCIATED GRADED RINGS

KAZUHO OZEKI

ABSTRACT. Let A be a Noetherian local ring with the maximal ideal \mathfrak{m} and I an \mathfrak{m} -primary ideal in A. The purpose of this paper is to study the equality on Hilbert coefficients of I given in Elias and Valla [EV], without assuming that A is a Cohen-Macaulay local ring. It is related to the Buchsbaumness of the associated graded ring of I.

References

[EV] J. Elias and G. Valla, Rigid Hilbert functions, J. Pure and Appl. Algebra 71 (1991) 19-41.

ORGANISATION FOR THE STRATEGIC COORDINATION OF RESEARCH AND INTELLECTUAL PROP-ERTY, MEIJI UNIVERSITY, 1-1-1 HIGASHI-MITA, TAMA-KU, KAWASAKI 214-8571, JAPAN *E-mail address*: kozeki@math.meiji.ac.jp