

1015-13-52

Juergen Gerhard Herzog* (mat300@uni-essen.de), Fachbereich Mathematik, Universitaet
Duisburg-Essen, Campus Essen, Universitaetsstr. 1, 45117 Essen, NRW, Germany. *A
generalization of the Taylor complex construction.*

Given multigraded free resolutions of two monomial ideals we construct a multigraded free resolution of the sum of the two ideals. This construction is used to bound the projective dimension and the regularity of the intersection and the sum of two monomial ideals. (Received January 18, 2006)