962-13-1053 Meral Arnavut (marnavut@math.unl.edu), Roger A. Wiegand (rwiegand@math.unl.edu) and Sylvia M. Wiegand\* (swiegand@math.unl.edu), Department of Mathematics and Statistics, University of Nebraska, LINCOLN, NE 68588-0323. One-dimensional rings of bounded representation type. Preliminary report.

Let R be a one-dimensional reduced Noetherian ring with finite integral closure, and let  $p_1, \ldots, p_s$  be the minimal prime ideals of R. Given a finitely generated torsion-free R-module M, we define rank(M) to be the s-tuple  $(r_1, \ldots, r_s)$ , where  $r_i = r_i(M)$  is the dimension of  $M_{p_i}$  as a vector space over  $R_{p_i}$ . We say R has bounded representation type provided there is an integer c such that  $r_i(M) \leq c$  for every indecomposable torsion-free R-module M and every  $i \leq s$ . It is known that no universal bound exists, valid for all R of bounded representation type. On the other hand, if one restricts to modules whose rank functions do not vary too widely, one can obtain universal bounds. For example, for modules of *constant* rank, the (sharp) universal bound is 12. Another bound is given by the following: If  $n \geq 18$  and all the  $r_i$  are between nand 2n - 14, then M must decompose. These bounds are obtained by examining the combinatorial structure of Spec(R)and a certain monoid that depends on the local bound (never more than 4) for the ranks of indecomposables. (Received October 02, 2000)