FRAUKE BLEHER, University of Iowa, Department of Mathematics, 14 MLH, Iowa City, IA 52242-1419, USA Universal deformation rings and dihedral defect groups

Let k be an algebraically closed field of characteristic 2, and let W be the ring of infinite Witt vectors over k. Suppose G is a finite group, and B is a block of kG with dihedral defect group D which is Morita equivalent to the principal 2-modular block of a finite simple group. We determine the universal deformation ring R(G, V) for every kG-module V which belongs to B and has stable endomorphism ring k. It follows that R(G, V) is always isomorphic to a subquotient ring of WD. Moreover, we obtain an infinite series of examples of universal deformation rings which are not complete intersections.