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Jennifer Froelich* (froelich@math.uiowa.edu), The University of Iowa, Department of Mathematics, 14 MacLean Hall, Iowa City, IA 52242. *Endomorphism Rings of Representations of S_5 in Characteristic 2.*

Consider the symmetric group S_5 and its non-trivial double cover \tilde{S}_5 with generalized quaternion Sylow 2-subgroups of order 16. Let k be an algebraically closed field of characteristic 2 and let $B_0(kS_5)$ be the principal block of kS_5 . We will discuss how to find all $B_0(kS_5)$ -modules with stable endomorphism ring isomorphic to k that also have stable endomorphism ring isomorphic to k as $k\tilde{S}_5$ -modules. These modules will have well defined universal deformation rings in the sense of Mazur. (Received September 18, 2007)