

**Meeting:** 1003, Atlanta, Georgia, SS 8A, AMS Special Session on Modular Representation Theory of Finite and Algebraic Groups, I

1003-20-1071      **Harald Ellers\*** ([hellers@allegheny.edu](mailto:hellers@allegheny.edu)), Dept. of Mathematics, Allegheny College, 520 N. Main St., Meadville, PA 16335, and **John Murray** ([jmurray@maths.may.ie](mailto:jmurray@maths.may.ie)), Department of Mathematics, National University of Ireland, Maynooth, Co.Kildare, Ireland. *Branching rules for Specht modules*. Preliminary report.

Let  $\Sigma_n$  be the symmetric group of degree  $n$ , and let  $F$  be a field of odd characteristic. For any partition  $\lambda$  of  $n$ , let  $S_F^\lambda$  be the Specht module associated to  $\lambda$ . We determine the structure of the endomorphism algebra of the restricted module  $(S_F^\lambda) \downarrow_{\Sigma_{n-1}}$ . As a consequence, we find the indecomposable components of  $(S_F^\lambda) \downarrow_{\Sigma_{n-1}}$ . Namely, if  $b$  is a block idempotent of  $F[\Sigma_{n-1}]$ , then  $(S_F^\lambda) \downarrow_{\Sigma_{n-1}} b$  is 0 or indecomposable. Similar results hold for the induced module  $(S_F^\lambda) \uparrow_{\Sigma_{n+1}}$ . (Received October 03, 2004)