Invariants of Specht modules

Steve Donkin (York)

This is joint work with H. Geranios on the the modular representation theory of symmetric groups. Let m and n be positive integers. It was conjectured by D. Hemmer that the module of S_m-invariants of a Specht module for S_{m+n}, regarded as a module for S_n, has a Specht filtration. We provide a counterexample in each characteristic.