1030-05-58   **S van Willigenburg*** (`steph@math.ubc.ca`), 1984 Mathematics Rd, Vancouver, BC V6T 1Z2, Canada. *Multiplicity free expansions of Schur P functions.*

Schur P functions arise, for example, as weight enumerators of labelled posets of shifted skew shapes, and can be expressed as a linear combination of the better known Schur functions using the shifted Littlewood-Richardson rule.

In this talk we will give specific criteria for when the aforementioned expression is multiplicity free. From here we will apply this result to determine when the multiplicity of an irreducible spin character of the twisted symmetric group in the product of a basic spin character with an irreducible character of the symmetric group is multiplicity free.

This is joint work Kristin Shaw. No prior knowledge is assumed. (Received July 11, 2007)