

1053-20-236

Markus Schmidmeier* (markusschmidmeier@gmail.com). *The entries in the LR-tableau.*

Littlewood-Richardson tableaux of shape $\beta \setminus \gamma$ are semistandard Young tableaux with filling α' which satisfy the lattice permutation property. The number of tableaux of type (α, β, γ) is the LR-coefficient $c_{\alpha, \gamma}^{\beta}$, it plays an important role in many areas in algebra. In particular, $c_{\alpha, \gamma}^{\beta}$ is the leading coefficient of the polynomial which, for a given finite abelian p -group B of type β , counts the subgroups A in B such that A has type α and such that the factor B/A has type γ .

Suppose that a subgroup embedding $(A \subset B)$ corresponds to LR-tableau Γ . In my talk I will describe how the entries in Γ determine the structure of the embedding, and how they position the object $(A \subset B)$ within the category of subgroup embeddings. (Received September 06, 2009)