J. Gramain. Basic Sets for the Alternating Groups.

Basic sets, when they exist, are powerful tools to compute decomposition matrices of finite groups. In this talk, we show that, in odd characteristic p, the alternating groups have p-basic sets. We construct explicitly a basic set of the symmetric group, which then restricts to a basic set of the alternating group. This is joint work with Olivier Brunat (Ruhr Universität, Bochum).