

**E. C. Dade.** *On Stabilizer Limits of Irreducible Characters.*

We are considering pairs  $(G, \chi)$  consisting of a finite group  $G$  and a character  $\chi \in \text{Irr}(G)$ . Suppose that  $N \triangleleft G$  and that  $\theta \in \text{Irr}(N)$  lies under  $\chi \in \text{Irr}(G)$ . Then the stabilizer  $G_\theta$  of  $\theta$  in  $G$ , and the unique character  $\chi_\theta \in \text{Irr}(G_\theta)$  lying over  $\theta$  and inducing  $\chi$ , form a *Clifford reduction*  $(G_\theta, \chi_\theta)$  for the pair  $(G, \chi)$ . Repeating this process until no more proper Clifford reductions are possible, we reach a *stabilizer limit*  $(K, \psi)$  of the original pair  $(G, \chi)$ .

Suppose that  $(L, \chi)$  is another stabilizer limit of  $(G, \chi)$ . Let  $1 = K_0 \triangleleft K_1 \triangleleft \cdots \triangleleft K_k = K$  and  $1 = L_0 \triangleleft L_1 \triangleleft \cdots \triangleleft L_l = L$  be composition series for the groups  $K$  and  $L$  respectively. Examples show that  $k$  need not equal  $l$ . Nevertheless, the number of non-abelian composition factors  $K_i/K_{i-1}$  or  $L_j/L_{j-1}$  is the same in both series. In fact, the non-abelian composition factors for one series are pairwise isomorphic to those for the other series. A couple of other invariants for these non-abelian composition factors are preserved under these isomorphisms.