

S. Gagola. *Transfer and Tate's Theorem.*

Let H be a subgroup of a finite group G which contains a Sylow p -subgroup of G . As is well known, when the largest abelian p -groups that occur as factor groups of G and H are isomorphic, then the largest p -groups that occur as factor groups of G and H are isomorphic. This of course is Tate's theorem, and known proofs of this involve cohomology or characters. There is however a new elementary approach which uses only the transfer map. The main idea that is exploited here is that the largest abelian p -factor group of G is always isomorphic to a direct factor of the largest abelian p -factor group of H .