1038-19-249 **Grunewald Joachim*** (grunewal@math.uni-bonn.de), Endenicher Allee 60, 53115 Bonn, Germany. The Behavior of Nil-Groups under Localization and the Relative Assembly Map.

We study the behavior of the Nil-subgroups of K-groups under localization. As a consequence of our results we obtain that the relative assembly map from the family of finite subgroups to the family of virtually cyclic subgroups is rationally an isomorphism. Combined with the equivariant Chern character we obtain a complete computation of the rationalized source of the K-theoretic assembly map that appears in the Farrell-Jones conjecture in terms of group homology and the K-groups of finite cyclic subgroups. (Received February 11, 2008)