1004-57-257   **F. Rudolf Beyl*** (`beylf@pdx.edu`), Dept. of Mathematics & Statistics, Portland State University, P.O. Box 751, Portland, OR 97207-0751, and **Nancy Waller**, Dept. of Mathematics & Statistics, Portland State University, P.O. Box 751, Portland, OR 97207-0751. *The effect of cyclic factors of 3–manifold groups on homotopy classification.* Preliminary report.

A finite 3–manifold group is a finite group isomorphic to the fundamental group of a closed connected orientable 3–manifold. Let G be such a group and C_m the cyclic group of order m, with $(m, |G|) = 1$, then $G \times C_m$ is also a 3-manifold group. We say that ZG has weak cancellation if the ideals $< k, N > \subseteq ZG$ are either free or not even stably free, for all $k \in Z$ with $(k, |G|) = 1$. There is a bijection between the isomorphism classes of rank 1, stably free $Z(G \times C_m)$-projectives and the isomorphism classes of rank 1, stably free ZG-projectives.

Theorem: Let G be finite 3–manifold group, $(m, |G|) = 1$, and assume that ZG has weak cancellation. Then there is a bijection between the isomorphism classes of algebraic 2–types for ZG and those for $Z(G \times C_m)$. (Received January 25, 2005)