Jack Schmidt\* (jack@ms.uky.edu), Department of Mathematics, 715 Patterson Office Tower, Lexington, KY 40506-0027. Rewriting systems for a family of perfect groups.

Rewriting systems are used to efficiently find and analyze families of perfect groups analogous to p-groups of maximal class. Computer calculations are quite effective with this method and are used to give evidence and counterexamples to various generalizations of the theory of p-groups of maximal class to these families of perfect groups. (Received January 05, 2007)