

1096-VE-2572 **Marianna Bonanome***, mbonanome@citytech.cuny.edu, and **Margaret H. Dean**. *Introducing Interesting Groups in an Introductory Abstract Algebra Course*.

Most introductory abstract algebra courses at the undergraduate level will spend a fair amount of time on group theory. Isomorphism theorems, theory of abelian groups, and theory of finite groups may be covered in some detail. The common nonabelian groups provided as examples include dihedral symmetry groups, permutation groups and matrix groups. It can be challenging to provide further interesting infinite groups that can be explored and understood in some detail. In this talk we propose several interesting groups, such as Thompson's group F , the Lamplighter group L_2 , and self-similar groups, which can be made accessible to an undergraduate audience. We also discuss some of the difficulties that can arise when introducing them at the undergraduate level. (Received September 17, 2013)