1056-20-733 Elizabeth Wilcox* (wilcox@math.binghamton.edu), Binghamton University, Department of Mathematical Sciences, PO Box 6000, Binghamton, NY 13902. Complete Groups: The Automorphism Tower and Some Characterizations.

A group is complete if it has a trivial center and all of its automorphisms are inner, meaning they are induced by conjugation. H. Wielandt and J. S. Rose proved that all finite groups can be embedded in a finite complete group, through use of a series called the automorphism tower. This talk will give examples of complete groups, define the automorphism tower, and discuss characterizations of two types of complete semidirect products. (Received September 16, 2009)