Abstract: In the past couple of decades, group orderability has played a surprising role in the study of 3-manifolds. In this talk, we will focus on two key questions. When can the elements of a group be bi-ordered; that is, when is there a total ordering of a group’s elements invariant under group multiplication? Second, when does an automorphism of a group preserve a bi-ordering of the group? In particular, we will explore these questions for the fundamental groups of exteriors of links in the 3-sphere.