Greg CONNER

Wild braid groups and mapping class groups

Abstract. Braid groups are a standard topic of study for beginning topology students. This is because they are easy to define and calculate with, even though there are many subtle and deep aspects to them. Even though grade school children understand braiding and unbraiding of ropes, there are hard open questions about braids that even experts can't answer. Braid groups also have many interesting generalizations such as mapping class groups.

We will discuss various ways of generalizing the notion of braid group to allow for braids to have infinitely many strands. We will also generalize the notion of permutation in a somewhat unexpected way.