Determining the Hurwitz orbit of any tuple of the standard generators of the braid group

Yoshiro Yaguchi

Hiroshima University

Abstract. Hurwitz action of the n-braid group B_n on the n-fold direct product $B_m{}^n$ of the m-braid group B_m is studied. We determine the orbit of any n-tuple of the n distinct standard generators of B_{n+1}. In addition, we show that any n-tuple of the n distinct standard generators of B_{n+1} is transformed into any of those by Hurwitz action together with the action of B_{n+1} by conjugation.