## 1025-20-132 Lucas Sabalka<sup>\*</sup>, Department of Mathematics, One Shields Ave, Davis, CA 95616-8633. The Isomorphism Problem for tree braid groups.

Given a tree braid group  $B_nT$  on  $n \ge 4$  strands, we are able to reconstruct the tree T. Thus tree braid groups  $B_nT$  and trees T (up to homeomorphism) are in bijective correspondence for each n. We use this bijection to solve the Isomorphism Problem for tree braid groups, as well as to state a number of interesting corollaries. (Received January 19, 2007)