1025-20-187 **Claire W Wladis*** (cwladis@gmail.com). *Using Tree-Pair Diagrams to Represent Elements of Thompson's Group $F(n+1, m+1)$.*

Tree-pair diagrams have been used to represent elements of Thompson's group $F(n+1)$ and to analyze the metric properties of the group. It is possible to use tree-pair diagrams to represent elements of Thompson's group $F(n+1, m+1)$; however, our use of these diagrams must be adapted in several ways to classify minimal tree-pair diagram representatives and to define composition for elements of $F(n+1, m+1)$. We can then use these results to explore the metric on $F(n+1, m+1)$ and can show that this metric is not, as in the case of $F(n+1)$, quasi-isometric with respect to the number of carets or leaves in minimal tree-pair diagram representatives. (Received January 22, 2007)