

1135-VU-1218      **Steven Scheirer\*** ([sts413@lehigh.edu](mailto:sts413@lehigh.edu)). *Topological complexity of graph configuration spaces.*

The topological complexity of a path-connected space  $X$ , denoted by  $TC(X)$ , is an integer which can be thought of as the minimum number of continuous “rules” required to describe how to move between any two points of  $X$ . We will consider the case in which  $X$  is a space of configurations of  $n$  points on a graph  $\Gamma$ . There are two such configurations spaces: in the first, denoted by  $C^n(\Gamma)$ , the order of the points on  $\Gamma$  is of importance, while in the second, denoted by  $UC^n(\Gamma)$ , the order of the points is irrelevant. We will discuss methods to determine the topological complexity of these spaces in the case in which  $\Gamma$  is a tree. (Received September 20, 2017)