Topological Complexity of Configuration Spaces of Trees

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The topological complexity of a space X, denoted $TC(X)$, is a positive integer which is related to the problem of motion planning within X. It can be thought of as the minimum number of continuous rules needed to describe how to move between any two points of X. The space X can often be interpreted as a configuration space in some real-life system. We will mention some of the tools for computing $TC(X)$ and then discuss the topological complexity of the configuration space of n points on a tree.