

On topological complexity of robot motion

Alexander Dranishnikov

(University of Florida)

Abstract

Topological complexity $TC(X)$ of a configuration space X was defined by Farber as numerical invariant that measures the navigational complexity of X . The invariant TC is similar to the Lusternick-Schnirelman category of a space $catX$. We will discuss the problem of computation of $TC(X)$ as well as the relation of TC to cat .