

# Lower estimates for the topological complexity

(Talk)

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The topological complexity, denoted  $\mathrm{TC}(X)$ , is a homotopy invariant of the space  $X$  (often interpreted as the configuration space of some complex mechanical system) that has important applications in topological robotics. The determination of  $\mathrm{TC}(X)$  is usually based on the computation of suitable upper and lower estimates (e.g., dimension, Lusternik-Schnirelmann category, cup-length, category weight, . . .). In this talk I will describe describe the results of a joint work with Aleksandra Franc on a general framework for the study of lower estimates for  $\mathrm{TC}(X)$ .

MSC2010: 55R70, 55M30.

Keywords: topological robotics, topological complexity, fibrewise  
Lusternik-Schnirelmann category.

Section: xx.