

1152-55-205

Yuli Rudyak (rudyak@ufl.edu) and **Soumen Sarkar*** (soumen@iitm.ac.in), Tamil Nadu 600036, India. *On LS-category and topological complexity for maps of degree one.* Preliminary report.

Yuli Rudyak asked the following question: Given a map $f : M \rightarrow N$ of degree 1 of closed manifolds, is it true that the Lusternik–Schnirelmann category of M is more than the LS-category of N ? There are several results which give an affirmative answer to this question. Replacing LS-category by Topological Complexity we get a similar question. In this talk, I will discuss some recent progress on these problems. This is joint work with Yuli Rudyak. (Received September 04, 2019)