

Higher Homotopic Distance

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Abstract

Homotopic distance for maps which is defined by Macias-Virgos and Mosquera-Lois is both related to topological complexity and Lusternik-Schnirelmann category [2]. In this talk, we will consider the higher homotopic distance. We will introduce some of its properties and give its relation with the higher topological complexity and the Lusternik-Schnirelmann category. This is a joint work with Tane Vergili.

References

- [1] M. Farber, Topological Complexity of Motion Planning, *Discrete Comput. Geom.* 29 (2003), No. 2, 211-221.
- [2] E. Macias-Virgos, D. Mosquera-Lois, Homotopic Distance between Maps, preprint. arXiv: 1810.12591v2.
- [3] Y. Rudyak, On higher analogs of topological complexity, *Topology Appl.* 157 (2010) 916-920. Erratum: *Topology Appl.* 157 (2010) 1118.