On fundamental group of soft topological spaces

Ali Akbar Bahredar[1], Nader Kouhestani[1], and Hadi Passandideh[1]

[1]University of Sistan and Baluchestan

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Abstract

In this paper we introduce the notion of fundamental group for soft topological spaces. To do so, we define soft paths, soft loops and the notion of ξ-soft path homotopy, and study some of their basic properties. We also show that the fundamental group of an ε-soft topological group is commutative, and that π_1^{soft} is a functor between the category of soft topological spaces and the category of groups.

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