

On retracting properties and covering homotopy theorem for S-maps into S_χ -cofibrations and S_χ -fibrations

ABSTRACT

In this paper we generalize the retracting property in homotopy theory for topological semigroups by introducing the notions of deformation S-retraction with its weaker forms and EShomotopy extension property. Furthermore, the covering homotopy theorems for S-maps into S_χ - fibrations and S_χ -cofibrations are introduced and pullbacks for S_χ -fibrations behave properly.

Keyword: Homotopy; Topological semigroup; Retraction; Fibration; Cofibration