

[Šostak, A. P.](#)

On a fuzzy topological structure. (English) [Zbl 0638.54007](#)
[Rend. Circ. Mat. Palermo, II. Ser. Suppl. 11, 89-103 \(1985\).](#)

The author introduces a generalization of fuzzy topology and relates it to previously studied notions through the categorical framework introduced by *S. E. Rodabaugh* [*Fuzzy Sets Syst.* 9, 241-265 (1983; [Zbl 0527.54005](#))]. The author's structures are fuzzy subsets of I^X instead of the crisp subcollections usually studied. He develops a category of such structures and introduces several functors - for example, a generalization of Lowen's ω construction. Lastly, he defines a degree of compactness, announces several results without proof, and states a related unsolved problem.

Reviewer: [A.J.Klein](#)

MSC:

[54A40](#) Fuzzy topology
[54B30](#) Categorical methods in general topology

Cited in **46** Reviews
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Keywords:

[generalization of fuzzy topology](#)