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Sufficient conditions for a local homeomorphism to be injective. (English) Zbl 0774.55003
Topology Appl. 47, No. 2, 133-148 (1992).

Let U be an open connected subset of R^n with compact closure \bar{U} and whose boundary ∂U has only finitely many components. The author formulates conditions for a map $f : \bar{U} \rightarrow R^n$ such that $f|U$ is a local homeomorphism to be a homeomorphism onto its image. The conditions are of two types: first, they assume that each of the components of ∂U has, homologically speaking, some of the properties of a closed orientable $(n-1)$ -dimensional manifold, and second, they control the behavior of $f|_{\partial U}$ in a natural fashion.

Reviewer: [S.Y.Husseini \(Madison\)](#)

MSC:

[55M99](#) Classical topics in algebraic topology

[55N07](#) Steenrod-Sitnikov homologies

[57N99](#) Topological manifolds

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