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On the growth of the sequence of indices of the iterates of $\mathbb{R}^3$-homeomorphisms

Given a homeomorphism $f\colon \mathbb{R}^3 \to \mathbb{R}^3$ such that $Fix(f) = Per(f) = \{0\}$, we will discuss in geometric dynamical terms the behavior of the sequence $\{i(f^m, 0)\}_{m\in\mathbb{N}}$ of the fixed point indices of its iterates at 0. We shall comment, from this point of view, some of the most important known results in this topic.

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