Limit Sets of Typical Homeomorphisms

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Abstract. Given an integer \( n \geq 3 \), a metrizable compact topological \( n \)-manifold \( X \) with boundary, and a finite positive Borel measure \( \mu \) on \( X \), we prove that for the typical homeomorphism \( f : X \to X \), it is true that for \( \mu \)-almost every point \( x \) in \( X \) the limit set \( \omega(f, x) \) is a Cantor set of Hausdorff dimension zero, each point of \( \omega(f, x) \) has a dense orbit in \( \omega(f, x) \), \( f \) is non-sensitive at each point of \( \omega(f, x) \), and the function \( a \to \omega(f, a) \) is continuous at \( x \).

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