

A generic compact subset of the real line

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A *symmetric Cantorval* is a compact subset $C \subseteq \mathbb{R}$ whose boundary in \mathbb{R} is homeomorphic to the Cantor set. We show that C is a generic compact subset of the real line. Namely, it can be characterized up to increasing homeomorphisms by a simple extension property. As a consequence, we show that every nonempty compact subset of the real line is homeomorphic to an increasing retract of C .

This is a joint work with Wojciech Bielas and Marta Walczyńska.