

On invariant sets with vanishing derivative and Cantor set dynamics

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The aim of this talk is to characterize all Cantor set systems that can be embedded in interval with vanishing derivative over it. Starting motivation for this study is an old question whether invariant subset $C \subset [0, 1]$ on which derivative of interval map f vanishes must contain a periodic point, which was recently answered in the negative by Ciesielski and Jasiński.

(joint work with Silvere Gangloff)