

# New Trends in Onedimensional Dynamics

## Celebrating the 70<sup>th</sup> anniversary of Welington de Melo

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**Title:** Topology determines geometry?

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**Abstract:** Rigidity is a central topic in dynamics. Within the context of this talk rigidity states that two topologically conjugate maps are in fact smoothly conjugate on their attractors. The topology of maps determine their geometry. It has long been expected that rigidity should hold for one-dimensional maps of sufficient smoothness and of bounded combinatorics. In this talk I will discuss recent results showing that surprisingly there are natural classes of maps on the interval where rigidity fails, despite being analytic and having bounded combinatorics.