On interval inverse limits

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Abstract

A continuum (nonempty compact connected metric space) is arc-like if it admits an arbitrarily small mapping onto the unit interval. It is well known that every arc-like continuum can be represented as inverse limits on interval with continuous bonding functions. In this talk I will first present the notion of inverse limit space, give some elementary examples and then discuss characterization of arc through the inverse limit on interval. In the second part of the talk I will proceed to more complicated examples of inverse limits on interval, namely tent inverse limits. I will state some (relatively) old and recent results in this context and, if time permits, discuss their generalization to a wider class of arc-like continua. This talk will be mainly based on a joint work with Ana Anusic.