

Hossein Lamei Ramandi

Münster University (Germany)
hlamaira@exchange.wwu.de
hlramandi@gmail.com

Baumgartner's Isomorphism Theorem for a Kurepa Line

We will sketch the proof of the following theorem.

Theorem. *It is consistent with CH that there is a Kurepa line K of size \aleph_2 such that whenever $L \subset K$ is \aleph_2 -dense and for all $x \in L$ the coinitality and cofinality of x in L is uncountable, then L is isomorphic to K .*

This theorem should be compared with the following well known Baumgartner's theorem: It is consistent with ZFC that all \aleph_1 -dense sets of reals are order isomorphic. In other words, we can have an analogue of Baumgartner's theorem for Kurepa lines as well.