

Simple dense canals and dead ends

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We present the definition of a canal of a plane continuum from [1] and give examples of continua with specific kinds of canals. What type of canal is possible depends on the continuum and its embedding, therefore we ask if there is a continuum such that every embedding contains what is known as a simple dense canal. We then show that, with some restrictions, we can use a plane continuum and its canal to construct a new continuum and a new canal while preserving some properties of the original canal. This construction uses our notion of a dead end of a canal. This is joint work with my PhD mentor Jernej Činč (University of Maribor, Slovenia).

References

- [1] K. Sieklucki, "On a class of plane acyclic continua with the fixed point property", *Fundamenta Mathematicae* 63 (1968), 257-278.

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