

THE PSEUDO-ARC

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A function f in class \mathcal{B} is said to be of disjoint type if its Fatou set is connected and contains its singular set. For these functions, the union of any component of the Julia set with infinity is a continuum, known as a Julia continuum. Recently, Rempe-Gillen gave an almost complete description of the possible topology of the Julia continua of a disjoint type function. He also showed that there is a disjoint type function which has a Julia continuum that is a pseudo-arc.

The pseudo-arc is a famous example of a continuum which contains no arcs, with the intriguing property of being homeomorphic to each of its non-degenerate subcontinua. In this talk I will explain how it is possible to construct a pseudo-arc by chains.