Chapter 13

Lost continua

This section contains continua from the the first version.

13.1 Arc-like continua

The arc-like continua are beautiful

13.1.1 Topologist's Sin Curve

The *Topologist's Sin Curve* is well known continuum which is not arcwise connected. The continuum is defined by the union

$$\{(x,y) \in R^2 : 0 < x \leq 1, y = \sin(1/x)\} \cup \{(0,y) \in R^2 : -1 \leq y \leq 1\} \quad .$$

It has just two path components. More we can find in [74, p.137] .

13.1.2 Open Sin

The *Open Sin* is defined by the Euclidean closure of the set

$$\{(x,y) \in R^2 : -1 < x < 1, y = \sin(1/(x^2 - 1))\} \quad .$$

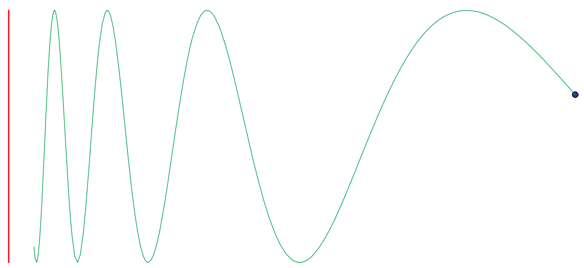

Figure 13.1.1: (A) Topologist's Sin Curve