

“Refuting” Cantor

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The German mathematician Georg Cantor used his famous diagonal argument to prove his celebrated theorem showing that there is no bijection between the set of all natural numbers and the set of all real numbers.

Cantor’s theorem is accepted by the mainstream mathematical community. Despite this, some authors seek to refute Cantor’s theorem by proposing bijections between the set of all natural numbers and the set of all real numbers.

In this talk we are going to examine some of the more interesting proposed “refutations” of Cantor’s theorem. We make two points for each “refutation”: we show what is the mistake in the “refutation”; we show that there are some interesting ideas inspired by the “refutation”. We keep this amusing talk short, simple and sweet.

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