source theory

Alex Glandon

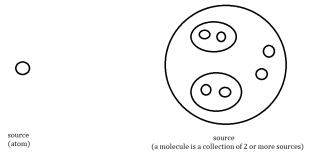
1 Introduction

Hilbert's program used $|\ |\ |$ symbols called signs which in this example represent the natural number 3.

Source theory seeks a new ground of mathematics.

2 Definition of a Source

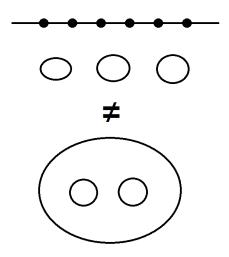
A source is a source (an atom) or a collection of 2 or more sources.



3 Two Dimensions or Higher

Theorem: Sources do not exist in 1 dimension.

Proof



4 Sources are equivalent in dimensions $n \ge 2$

Theorem: In any finite natural number dimension $n \geq 2$, sources are equivalent.

Proof:

Consider the interior and exterior of a circle in topological space. The interior and exterior are not connected.

Consider the interior and exterior of a sphere in a topological space. The interior and exterior are not connected. In this sense, boundaries of sources are equivalent in 2 dimensions and in any finite higher dimension (2,3,4,5...).