# Bootstrap Event of Existence

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May 31st, 2024

#### Abstract

In this paper, we explore the concept of the bootstrap event of existence. We argue that the notion of "nothing" is purely an abstraction and that something must always exist. At the inception of recursive existence lies the bootstrapping event, characterized by a zero-dimensional object that evolves by following the principle of least resistance. This process initiates the emergence of a one-dimensional object, and through continuous application of the least resistance principle, the complexity of existence evolves, leading to the current state of the universe.

#### 1 Introduction

The concept of "nothing" has been a subject of philosophical debate for centuries. However, from a physical perspective, the absolute absence of anything—"nothingness"—is an abstraction that does not hold in reality. This paper posits that for existence to be recursive, there must be an initial event or condition: the bootstrap event of existence.

## 2 Bootstrap Event

The bootstrap event of existence refers to the initial condition or event from which all existence recursively emerges. At this point, we encounter a zerodimensional object. This object, by necessity, follows the principle of least resistance, which is a fundamental physical principle stating that systems evolve towards states that minimize resistance or energy expenditure.

#### 3 From Zero-Dimensional to One-Dimensional

Following the least resistance principle, the zero-dimensional object transitions into a one-dimensional object. This transition can be seen as the genesis of spatial and temporal dimensions. The least resistance principle guides the evolution of the zero-dimensional object into higher dimensions.

## 4 Recursive Evolution of Complexity

After the initial transition to a one-dimensional object, the process continues recursively. Each stage of evolution follows the principle of least resistance, leading to increasingly complex structures. This recursive process underpins the emergence of multi-dimensional objects and, eventually, the complex universe we observe today.

#### 5 Discussion

The principle of least resistance is crucial in understanding the evolution of existence from a zero-dimensional point to the complex structures we see today. This principle not only explains the initial bootstrap event but also provides a framework for understanding the continuous evolution of the universe.

## 6 Conclusion

In conclusion, the bootstrap event of existence provides a compelling framework for understanding the origin and evolution of existence. The transition from a zero-dimensional to a one-dimensional object, guided by the principle of least resistance, offers a fundamental explanation for the recursive nature of existence and the emergence of complexity in the universe.