

The universe research papers examples

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The cosmos is a vast super structure consisting of planets, stars, contents of intergalactic space, subatomic particles, matter and energy. It is approximately forty six billion light years in radius. The universe was formed 13 billion years ago, when the Planck epoch expanded causing the Big Bang explosion. It is governed by laws and constants that determine the position and the interactions of objects in the universe. Cosmologists argue that the universe has been expanding since its formation. The Big Bang model of the universe, the universe will begin to crumble in the phase, scientists refer to as the Big Crunch.

The dimension of an object is determined by the number of coordinates needed to locate a spot on its surface or within it. The constituent volume in relation to the location of the object along scalar time axis and the spatial composition of the object, are key elements to consider in defining the dimension of the object. Configuration of spaces in leads to higher dimensional spaces. These abstract spaces exist in the sciences and mathematics. They are independent of the physical space that we inhabit. The temporal dimension is commonly referred to as the fourth dimension or the Minkowski space. A temporal dimension is one limited by time. We are limited by time and we can only move through in a unidirectional manner. The fourth dimension is used to measure physical change. Poincare and Einstein's special relativity theory describes the temporal dimension and space to be the components of a four dimensional manifold.

Spatial dimension is limited by distance. The Cartesian and space coordinate system outlines the three dimensions of space. A line is usually described as one dimension; a plane is two dimensional and a cube three dimensional

space. Movement along the linear dimension is along the width, the length or the height.

Euclidean interpretation of the universe has been widely bought in the modern interpretation of the universe. Physicists and cosmologists have come up with several theories in an attempt to explain the temporal and physical dimensions. The string theory and M-theory are some of the theories that have been postulated in an attempt to explain the universe both at the atomic and supergalactic levels. The string theory is a developed version of the bosonic theory. Prominent scientists such as Stephen Hawking and Edward Witten argue that the string theory is an attempt to correctly define the fundamental nature of the universe. To maintain its inconsistency with quantum theory, the string theory proposes that we must have the critical dimension. The critical dimension adds extra dimensions to the already existing four dimensions under the Euclidean interpretation of the universe. It proposes 26 dimensions for the bosonic theory and ten dimensions for the super string theory. Proponents of this theory argue that the extra dimensions solve the conformal anomaly under the conformal field theory.

M-theory is an extension of the string theory. It attempts to unify the five theories of string theories by addressing some of its identifications and dualities. It proposes a space time continuum of eleven dimensions.

Proponents of this theory, such as Chris Hull and Asloke Hill argue that there is a super gravity between the second and fifth membranes of the eleven dimensions. Critics argue that the theory cannot be tested as well as being unpredictable.

In conclusion, the universe is vast beyond our minds can comprehend. Human beings have come up with theories and counter theories in an attempt to solve the mysteries of the universe. Prominent scientists have worked tirelessly to explain the mysteries of the universe, such as dark matter. The theories that explain the Euclidean interpretation of the time space continuum are some of the efforts made to understand the universe that we live in.

Works Cited

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