

Peter Haralamos ©

February 27, 2003

Origins of the Universe

Astronomers, cosmologists, and scientists aided by powerful computers and enormous new telescopes are attempting to answer questions about where the universe and galaxies originated. Will they solve the mystery, probably not but they have come up with some entertaining new ideas that are sure to wet the appetite of many lost souls.

A Penn state astrophysicist, Tom Abel thinks that stars forming inside swirling gas were the beginning of the first stars of the universe. A few hundred thousand years after the big bang the universe remained in darkness for about a half billion years. This darkness was ended after gases that had been swirling for a million years gathered into clouds, formed a clump and created a star 100 times larger than our sun. The first star was formed about 14 billion years ago and burned hot and short. These stars only lasted a few million years after which they exploded in huge supernova explosions throwing new material such as carbon and oxygen into space, creating stars, planets, light and life. Abel believes this process was going on all over in single star micro galaxies, which eventually ended in explosions that seeded the entire universe with everything down to the air we breathe.

Abel also believes that dark matter was the driving force behind the creation. Dark matter is thought to exist because visible matter in the universe can't account for some observed gravitational effects. Without the dark matter there would not have been enough gravity to pull the matter together to form the stars. Dark matter pulled the matter together to form the stars, pulled the stars together to form galaxies and pulled the galaxies together to form clusters.

Julio Navarro of the University of Victoria in British Columbia uses computer simulations to show how galaxy collisions could have formed the present shape of galaxies. He thinks that the collisions added on to the galaxies like a lump of clay being sculpted. The original shapes of galaxies were all disc shaped and through collisions they eventually became larger with arms spiralling out like they exist today. He also states that the Andromeda galaxy is headed toward our galaxy, the Milky Way, at a speed of 300,000 miles per hour and is going to collide in several billion years.

A noted astronomer from the California Institute of Technology named Chuck Steidel has found many newly formed galaxies. He finds them by watching them disappear. He views them through red, green and ultra violet filters and sees many disappear when he views them through the UV filter. He believes that these are early, distant galaxies whose hydrogen gases are absorbing the UV light. Steidel also believes strong winds from supernova explosions aid dark matter in galaxy formation.

Scientists have begun construction on a new telescope more powerful than the Hubble space telescope that will hopefully answer many questions about the dark ages of the universe after the big bang. It will be able to detect objects much dimmer and further away, that scientists now can only view through computer simulations.

Space is an interesting topic but I don't believe that humans should look to it for the answers to the questions about the origins of the universe. There are certain facts that can't be argued and then the rest are just theories. I don't believe the universe was created by the big bang. There is too much detail and order to happen by some chance explosion. God created it. He created everything we now know. While many people argue about time and how old the earth is, I don't think it matters. Time is something that only exists in our minds it has no meaning to God because he is eternal. I believe that these astronomers,

cosmologists and scientists come up with these ideas to distract people from the truth. God is the Creator of the universe.

Works Cited

Cowen, R (2003 February). Galaxy Hunters: A new breed of scientists leads a cosmic revolution in thinking how the universe came to be. "National Geographic, 2", 2-29.

Cowen, R (2003 February). Galaxy Hunters: A new breed of scientists leads a cosmic revolution in thinking how the universe came to be. "National Geographic, 2", 2-29.

Retrieved February 26, 2003 from the World Wide Web:

<http://magma.nationalgeographic.com/ngm/0302/feature1/index.html>