Exo planet theory

Business

There is said to be at least 1 exo planet for each of the billions of stars in the Milky Way Galaxy. The first exo-planet, or planet that orbits a star other then the Sun, was discovered all the way back in 1995 and since then the amount of exo-planets have increased dramatically. These planets are found mainly by watching the star it orbits. There is a specific kind of dip in the light as the planet transits its host star. For some of the stars, there are planets that have been found in a habitable zone, the so called ‘ Goldilocks Zone’.

There life may exist, where there could be liquid water and days and nights and breathable atmospheres. Unfortunately, a few of these planets have been found tidally locked, when one face is always facing the star, where its orbit time is the same as the time it takes to turn on its axis, like the Earth’s Moon. That would leave one side broiling hot and the other freezing cold. Thus life could only exist on the terminator, and even then it would be extremely fragile and not likely to sustain itself for a long period of time. There are other planets that they have speculated to be completely covered in water.

Others are covered in water ice, or perhaps some other element. Many of these exo planets are found to have extreme weather as well, such as when they are tidally locked and have strange weather circumstances. Or they can have a major greenhouse effect, such as on Venus. Or they can have no atmosphere, or no solid surface, or no liquid on the surface. Also, many of these exo-planets orbit close to their star, for the majority of planet harboring stars that we know of are red dwarfs, and give off little heat.

But most of these planets are gas planets, like Jupiter, but most are larger than that. It is very possible that, with the many exo-planets that we have discovered so far, that we could discover a habitable or inhabited planet, and that would cause a breakthrough in science. Everyone believes, and I am one, that we cannot be alone, that our small speck of dust in this vast ocean of space could not be the only living world. The amount of planets are astounding, considering that people once thought that planets were unique. They are not, as we have now discovered.

There are thousands, millions, billions, even in our own galaxy! Who is to say about the billions of galaxies that we know of! The universe is vast in size, so vast that one cannot comprehend it or fully understand it no matter how hard they try. We also know of planets in the process of creation, for we have figured out not only how they are created, but how to penetrate the depths of the nebulae that hide them from view. Stars form when a nearby supernova explodes, making a spark fly and a nearby pillar on a nebula begin to collapse. Gravity takes over and pulls in the hydrogen gas making up the nebula. Soon enough, the proto star has a disk spinning around it. Planets are formed when a disk of the left over star-stuff that has not been used by the star is captured by the new stars gravity.

Basically it keeps up the circular spin that it had as the star was created, creating an orbit. In the vacuum of space, the cosmic dust coalesces into rocks, boulders, and eventually planets that are constantly bombarded and growing. Many of the stars we have found in the nebulae have dark rings around them, suggesting that planets are forming in the rings. We have seen and recognize this in the infrared images of these stars, for infrared basically

measures heat and it is the best method we have to break through the dark cover that the stars hid in. Other stars, such as the Vega system, also still have a forming disk. These disks are not uncommon throughout the galaxy and the universe.

Just imagine! It is the future, and humans have made their way into space, created starships that could take them anywhere. Imagine the vast majority of planets there is to wonder to! And each one is different! How many amazing worlds we would see, touch, taste, smell! The differing worlds on which we could walk, discover things we never knew before, gain a whole new perspective and understanding of the world around us! Oh, how I've dreamed to do that, staring out my window into the immense dark ocean above us, stretching out around us, holding so many wonders I long to see. But that is for the future. What we can do now is watch, wait, and discover yet more worlds, hopefully finding one like our own, hopefully finding ones that are not, new jewels in the sky that we can study and wonder upon, and find out about it from home. We will have to wait for that moment when we can venture between the stars to walk upon their grounds, solid, liquid, or gas. As I said, there is an astounding amount of exo-planets in our galaxy alone.

Who is to say how many there are in the universe; we don't even know of the universes size. There surely has to be a few more inhabited worlds, perhaps like ours, perhaps quite different. And one day we may be able to visit these worlds. But now we can keep searching for them, finding out about different worlds, find out about the many different ways a world can be, and figure out whether life needs water or oxygen and nitrogen to exist; it could be much

different. Finding exo-planets is a significant discovery in science, just because of the thought and the excitement and opinions on it, and the fact that we may not be alone.