

# Life Beyond Earth

-Shabarinath Hari (VIII-K)



Space has always been a topic of fascination for mankind. It has remained mysterious and undiscovered for centuries. Ancient Greeks had believed for ages that the sun, moon, stars and all other heavenly bodies revolved around the earth. Later this theory was disproved by Nicolaus Copernicus. Galileo Galilei invented the telescope which was instrumental in the future of astronomy. With the help of telescope, he discovered many new facts about the planets in our solar system. In the 20<sup>th</sup> century, astronomy flourished. At this time, Yuri Gagarin became the first man in space. Soon after, Neil Armstrong touched the surface of moon.

This rapid advancement in astronomy gave rise to a question, "Are there more advanced intelligent races (extraterrestrial life) present in different planets of the universe?" Enrico Fermi, an Italian-American physicist, had a similar question that in the 13 billion years of earth's existence, why have no extraterrestrial life form communicated or came to earth? This question is commonly referred to as Fermi's paradox. Another American astrophysicist named Frank Drake came up with an equation to find the number of extraterrestrial civilizations in the universe. According to this equation, there are 52000 possible civilizations in our universe. This number is only an estimate and the actual number can be higher or lower.

The quest for finding extraterrestrial life has been continuing ever since the first mention of a possibility for their existence. People claimed to have witnessed Unidentified Flying Objects (UFOs), but there is no scientific evidence for these claims. Moreover, the concept of aliens is always perceived from the viewpoints of various science fiction novels and movie. The first to mention aliens was H.G.Wells, in his novel 'War of the Worlds'. In this novel, aliens were characterized as giant creatures which were trying to destroy humans.

The need of finding more evidences of an intelligent civilization is necessary as it may help in the technological development of both races. With the rise in environmental problems in the modern world, it has become a necessity to find an earth like planet, uninhabited by any native species. This planet must be positioned in the Goldilocks Region, that is, a region neither too close or nor too far to the star around which it is revolving around. Hence, the necessity of communicating with intelligent life form has become essential as they might be knowing solutions for solving the grand challenges of life.

The negative aspects of the emergence of such civilizations lie in the fact that if they are technologically superior to humans and want to conquer earth, the future of all species on earth will be in jeopardy. In this scenario, slavery of humans may emerge and all our efforts finding our extra-terrestrial neighbours would be in vain.

Will there be any such civilization? If any, could it be possible for us to communicate? Would they be a friend or foe?, Only time can give the answer.