M.Sc. Computational Mechanics

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Abstract

THERE ARE MORE STARS IN THE UNIVERSE THAN THERE ARE GRAINS OF SAND ON THE EARTH AND THERE ARE MORE ATOMS IN ONE GRAIN OF SAND THAN THERE ARE STARS IN THE UNIVERSE.

We are living on the Earth; A planet in the solar system with an approximate diameter of 12756 kilometers. But it is not the whole story. In this lecture we are trying to show briefly in just 2 minutes how far we can go within the limitation of light to see how big the visible universe is!

First we compare the size of earth to other planets and also the sun and adding to this we would have a sample model using Barcelona city map for demonstrating the distances between objects in the solar system.

After that we would notice the fact that the whole solar system is a fraction of the Milky Way galaxy and it is also one in thousands of billions of galaxies we know in the universe!

In an extended lecture, more interesting concepts like dark matter and dark energy may be discussed to show that the whole visible world we know is almost 5 percent of the universe. Then one could minimize the scales and goes through the atoms to see more strange dimensions there!

So this could be an initiation for going more deep inside the universe and ask from ourselves WHY THIS BIG? AND HOW?