

OUR YOUNG UNIVERSE

THE idea that the universe started with a 'Big Bang' billions of years ago is widely believed. Current estimates of the age of the universe range from 10 billion to 20 billion years, although some cosmologists have pushed the age back even further than this. What is not generally known, however, is that the universe simply cannot be anything like as old as billions of years. In fact, it cannot even be *millions* of years old. Why not? A brief look at some of the objects in the universe will explain why. (evidences for the youth of our own solar system have been presented in another factsheet).¹

GLOBULAR CLUSTERS

These are tightly-knit groups of stars, numbering many thousands. These clusters are so bright at the centre that they give the impression of being a solid, starry mass, appearing to thin out gradually from the centre. One — the Hercules Globular Cluster — contains at least 50,000 stars. Evolutionary astronomers claim that it is at least 5,500 million years old. In fact they claim that the globular clusters are composed of some of the oldest stars in the universe. Yet there is very strong evidence that these globular clusters are only thousands, rather than millions, of years old. Take the globular clusters within our own Milky Way galaxy for example. These clusters are moving so fast that they would escape from our galaxy altogether in 1 million years, yet they are still within it, so they must be younger than that. The spherical shape of the globular clusters also presents a problem for the proponents of a vast age for the universe. The gravitational pull of our galaxy upon them should distort them towards the centre of the galaxy. That they show no distortion suggests they have not been in existence for a great length of time. One astronomer, Harwitt, has described this as 'an astronomical anomaly.'²

A further problem concerns the solar wind which all stars, like our own sun, possess. Although the solar wind from one star is not very large, when multiplied by the total number of stars within a cluster, over a period of time this would amount to a very large quantity of matter. It has been calculated that in a cluster of 1 million stars, in just 10 million years there would be a build-up equal to 50 times the mass of our own sun! This gas could be easily detected, but it is just not there. This means that the globular clusters



cannot be anywhere near 10 million years old! When we note that astronomers call these clusters 'the oldest astronomical objects' what does this tell us about the age of the universe?

SPIRAL GALAXIES

Probably the most beautiful objects in the heavens are the spiral galaxies. Astronomers still have no satisfactory explanation of their origin.³ Some say that the spirals evolved from elliptical galaxies; others say they are evolving into elliptical galaxies. The spiral galaxies are rotating at the rate of about one rotation every 100

million years. This has the effect of slowly 'winding up' the galaxy. The appearance of the spirals suggests they have completed only one or two rotations, limiting their ages to a maximum of 200 million years. This is, of course, much older than most creationists would accept, but remember, this is assuming that the arms of the galaxies were not wound up at all when they were formed. If they were created in much the same form as they appear, they could be quite young. Some galaxies are 'barred spirals', and there is no known force that could preserve these bars of material for any length of time.



CLUSTERS OF GALAXIES

Galaxies are made up of millions of stars, but these galaxies themselves are found together in clusters. Our own Milky Way belongs to a group of about 19 galaxies. Some galaxies have bridges of material between them, yet they are moving apart at speeds of 21,000 kilometres a second. These 'bridges' would not be there if the galaxies had been moving apart for a vast period of time. Furthermore, half a million years ago, these galaxies would have been touching one another, so they must be younger than this. A further problem is what astronomers call 'the missing mass'. 98% of the mass required to keep the clusters of galaxies together is missing. There ought to be a large and detectable amount of gas and dust within these clusters, but it is not there.

Some have suggested that there are 'black holes' within these clusters, providing the

holding force needed, but they would need to be so large and numerous that they would be easily detected. Concerning the 'missing mass', one specialist has written: 'We have reached an impasse; inevitably some cherished scientific principle must fall.'⁴ That 'cherished principle' should be the belief that these galaxies, and our whole universe, is thousands of millions of years old. None of these problems arise, however, if we accept that the universe — and all the objects within it — was created by God, in much the state we find it today, a few thousand years ago.

Some would argue that the speed of light proves that the universe must have existed for billions of years, but we cannot ignore the foregoing physical objections to a vast age. There are satisfactory answers to the 'light problem'.⁵ Meanwhile, we submit that astronomy presents more problems to the long-age cosmogonist than the believer in a recent creation.

References:

- (1) *Our Young Solar System* (CRT Factsheet No. 10)
- (2) Harwitt: *Astrophysical Concepts*, p.43
- (3) 'The 8 Greatest Mysteries of Cosmology', *Astronomy* Vol. 29 No.6, June 2001, p. 50.
- (4) Bruce Margon: 'The Missing Mass', *Mercury*, January 1975, p.6.
- (5) e.g. see *Starlight and Time* (book and video) by Dr Russell Humphreys, Master Books, 1994 (available from CRT)