Sun, with the right atmosphere, and so on. But things are not so simple.

Our planet Earth is NOT at just the right distance from the Sun to provide the right temperature for life to exist. The reason that the temperature is right is because the atmosphere keeps it that way, and the atmosphere is right because living things have made it so. Without living things the surface temperature of the Earth would be 240°C to 340°C, and all water would long ago have boiled away. Living things need water, but the oceans depend for their existence upon living things! What is more, the Sun has been heating up since Life began, and the surface temperature of the Earth has remained more or less constant.

Then there is the question of oxygen. Without life, the atmosphere of the Earth, as are those of Venus and Mars, would be almost 100% carbon dioxide. It is now a mere 0.03%, having evolved through the action of plants to the point where there is 21% oxygen and 79% nitrogen. That 21% of oxygen is critical, for at 25% the whole world would catch fire!

The first bacteria did not breathe oxygen, and they serve us still, as the anaerobic bacteria that deal with our waste matter. Indeed, one way or another, our bodies incorporate earlier forms of life in their very cells; the mitochondria, for instance - once independent cells - which complete the breakdown of the carbohydrates we eat to provide our energy.

It is desperately important for Life that the sea shall not become more salt. How can it be therefore that the salinity has remained constant since the beginning of Life, when salt is being dissolved from rocks all the time? Oversimplified, it seems that the build up of limestone reefs by the living and dying of shellfish around continental shelves walls off gigantic evaporating pans. Even more astonishing, the limestone thus

created may account for the development of the system of plate tectonics, which in turn results in the recycling of the Earth's crust and the reburial of the salt in the Earth's molten interior - to say nothing of folding mountains and producing earthquakes!

Wherever we turn, we find all phenomena to be interdependent, as though Gaia were a living creature, whom Life serves as kidneys, heart and lungs. By contrast, Venus and Mars are dead, scarcely evolving or changing.

Gaia has millions of interactions which keep her healthy. James Lovelock describes those above, and many, many more. But he admits that human beings present a threat to the well-being of the Earth. Like AIDS, we undermine her immune systems, decimating the forests which could clean up our carbon dioxide emissions, stripping the Earth of its humus in the name of hygiene whilst fouling and despoiling the seas. Whether our technology is primitive or sophisticated it will devastate our habitat if we have no sense of awe or respect for Mother Earth.

Gaia will recover from her sickness, but will Mankind? Gaia could wipe us out. Man has chainsaws, but her systems include hurricanes, earthquakes, wind and ice ages. She can also muster to her side cohorts of bacteria and viruses, her primitive children. Famine and cholera can be depended upon to help her out, and Man himself can always be depended upon for a few wars.

Could it just be, perhaps, that Gaia really is alive, and in releasing so much new information into our minds via the computer she is awakening us to our plight? Readers who wonder about our place in the Cosmos cannot fail to be interested in what James Lovelock has to say.

CELL-LIKE UNIVERSE UNVEILS NEW MYSTERIES

By Paul Whitehead, FSR Director and Consultant

Astructure has cast doubts on the *Big Bang* theory of how the Universe was created. It could even force scientists to re-think all previous creation theories.

A study of distant galaxies by a team of British and American astronomers suggests à large-scale pattern which defies the popular notions of how the Universe started.

During its seven-year project, the team used powerful optical telescopes to study 200 galaxies in a "slice" of the Universe 6,000 million light years across. The latest results from this project showed that the galaxies were evenly distributed in "clumps", each of which were about 400 million light years apart.

The scientists concluded that the Universe may be cellular in form, with each cell diameter as large as 300-400 million light years. The team included Dr. Tom Broadhurst, of Queen Mary and Westfield College, London. Further studies are planned to try to gain a greater grasp of the implications.

Note by FSR:- There have been suggestions that the Universe is "sponge-like" in appearance, with a lot of empty space between galaxies. Dr. Paul Davies, well known to FSR readers for his own theories in the nature of reality, has in the past suggested the Universe may be a many-dimensioned structure, perhaps con-

taining millions of parallel worlds each interconnected in some strange way.

The latest news that the Universe appears to be built of cells, not dissimilar in many respects to the structure of living matter, is intriguing. Equally intriguing is the theory (also already well aired in FSR) that it may be possible to transfer information simultaneously between galaxies—with distance no barrier, and no time lag involved.

Interestingly, the March 17th, 1991 issue of *New Scientist* theorises about the existence of negative (*not* anti) matter in our Universe. If it does exist, it could explain the existence of the "bubbles" or voids, the writer (Robert Forward) states. The "bubbles" are sharply defined by large number of galaxies that "seem to lie on the surfaces of the bubbles". Few galaxies are found in the voids/bubbles, but those which are found are very bright and highly active.

The effect of the negative matter would be to push the positive particles (comprising the Universe we can see) to the surface of the voids, where they attract to form galaxies, stars, planets and us, the observers of it all

Forward writes that the "frothy" structure of the Universe could indicate that the Universe was formed with equal amounts of negative-matter particles and positive-matter particles. (Undoubtedly, he wrote this before the latest findings of the "cell-like" structure.)

What emerges from all this is a picture of a dynamically-balanced Universe—a self-creating "something" with in-built equilibrium (again, a feature possessed by living matter)—more complex in its structure than previously imagined by many conventional scientists.

If indeed the Universe can be compared to living matter, or at least non-biological (as we understand the term) cell-like matter with some form of consciousness, perhaps we have the basis for the theory, long suspected by some advanced thinkers, that the Universe is permeated by a matrix of memories or controls or creative "being-ness" (or all of these and more). Contributions from readers on this subject will be most welcome.

Postscript. Robert Forward is actually a consulting scientist specialising in exotic physical phenomena and advanced space propulsion. In January-February 1990, the "Journal of Propulsion and Power" published his article "Negative Matter Propulsion". Forward theorises that negative matter can be captured and used for high speed space travel; he argues that negative matter does not destroy positive matter, as anti-matter might, but that the two interact (by attraction and repulsion) in such a way that, if harnessed, they both travel along together at high speed.

MYSTERIOUS HOLES IN SWITZERLAND

By Walter A. Fuchs (Offenburg, Germany)

(Translation from German. G.C.)

We have received from FSR Consultant George Wingfield the German text of this article by Herr Walter A. Fuchs of Offenburg, Baden, Germany. It was published in 1990, seemingly, but does not bear the title of the journal in which it appeared, though from some hand-written words on one page it is clear that it was a publication concerned with parapsychology and astrology. — EDITOR

Parallel with the mysterious rings in the cornfields of England there are the holes of peculiar type and varying circumference which have appeared in four different parishes around Lake Geneva in Switzerland between 1972 and 1990.

List of the Holes in the Lake Geneva Region, with Sites and Dates:

1. ECHALLENS (VAUD). 1972

In June 1972 a farmer named Mertinat found, close beside his cowshed containing young calves, a circular hole 2 metres in diameter and 1.50 metres deep. Which means a volume of 4.7 cubic metres of soil.

2. OLLON, 1981

Near the holiday home of the airline pilot Claude Chapuis in the hamlet of Les Combes, which lies between Ollon and Villar, a circular hole 5 m. in diameter and 8 m. deep appeared during the night of December 5, 1981. *Volume: 157 cubic metres.*

3. BEGNINS (VAUD). 1982

Around about December 17, 1982, a hole with a diameter of 5.5 metres and a depth of 7.5 metres appeared on the tract of land known as La Peuyé, lying above Begnins and some 3 kms. to the northwest of Gland, owned by the farmer Roland Häfeli. *Volume: 178 cubic metres.* This hole was the subject of a report in the local press, and H.P. Schaffer made a photo-documentation on it.

4. CONFIGNON (GENEVA). 1990

During the night of February 3/4, 1990, in one of the outlying suburbs of Geneva, the largest hole found in Switzerland appeared. Its diameter was 10 metres and its depth 12 metres. *Volume: 942 cubic metres*

The hole was exactly above a tunnel (lying 18 metres below) on the motorway ring-road around Geneva. H.P. Schaffer also made a photo-documentation on this case.

Just as has been happening in England, these holes have been coming into existence during the night, and nobody has been able to witness their arrival. But all these holes have had one factor in common — namely, they have displayed some unusual features.

Thus, they are *perfectly circular*, with a crateredge of 90° , and in none of them has there been any trace whatever of the topsoil which would have had to remain on the floor of the hole had it been a

question of a normal case of soil-subsidence. This point has been mentioned by H.P. Schaffer and also by several local farmers whose sound powers of observation and good commonsense have enabled them to arrive at the justifiable conclusion that the missing soil has vanished upwards.

Following upon frantic attempts by the local newspapers to try, with the help of geologists, surveyors, and underground engineering experts, to offer some sort of rational explanation, H.P. Schaffer decided, working on the cases at Begnins and Confignon, to make a fresh attempt at an explanation.

Himself a UFO-investigator, Mr Schaffer got in touch with a friend of his, Engineer Hermann Ilg in Reutlingen, Germany, who possesses unusual mediumistic faculties, and asked Herr Ilg to ascertain, via his mediumistic channel, what the POWERS ABOVE had to say upon the matter.

So we now give below the highly informative message which was received, giving precise details concerning the *modus operandi* of the extraterrestrial creators of the holes, and indicating logically the presence of the same handwriting or "signature" as is responsible for the circles in the cornfields of England.

The Psychic Message Concerning the Hole at Begnins

Near Begnins, 3 kms. to the north-west of Gland, in Vaud, on a tract of agricultural land, a cylindrical hole 5.5 m. in diameter and 7.5 m. deep was found. The sides are edge — [About two lines of photostat lost or illegible. G.C.] for there is no visible trace of either vehicle-marks or of the excavated soil. The sudden appearance of the hole is inexplicable.

QUESTION: "Is there an extraterrestrial reason for this?"

REPLY (Received via mental telepathy): "The hole here referred to has indeed an extraterrestial cause. For some time past your Brethren from the Stars have been continously engaged in investigating the conditions of life on this Planet, with a view to determining to what extent a life-threatening pollution of the air, the water, and the soil, has started.

At the same time, measurements of the strength of the Earth's magnetic field are constantly being taken,