



Extreme Science

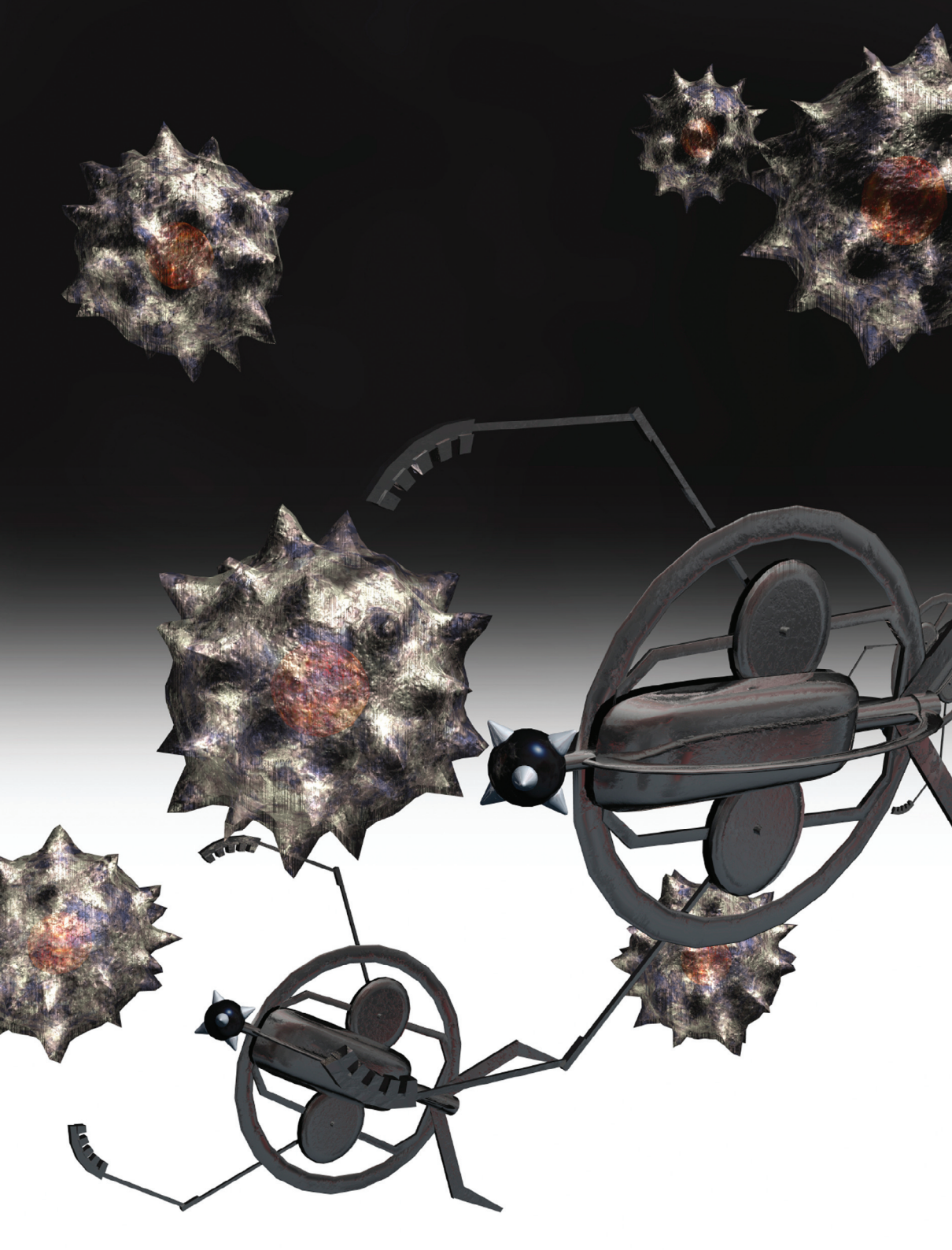


Just how weird can science get?

Plus! It's the end of the world in
The Man in the Machine

David Orme

Extreme Science



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by David Orme



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Trailblazers

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by David Orme

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Contents

| | |
|-----------------------------------|-----------|
| Get the facts | 5 |
| Beginnings and endings | 6 |
| Will we ever visit the stars? | 8 |
| Time travel | 10 |
| Bringing dinosaurs to life | 12 |
| Intelligent machines | 14 |
| Could we live forever? | 16 |
| Fiction | |
| The Man in the Machine | 19 |
| Extreme science word check | 36 |

The background features a metallic, blue-toned cybernetic head in profile on the left, with intricate circuit patterns and a glowing yellow aura. On the right, a large, stylized DNA double helix is rendered in a metallic, reflective silver color. The overall theme is futuristic science and technology.

Extreme Science

Get the facts

Beginnings and endings

How did the universe start?

Most scientists say the universe started with a **big bang** 13.7 billion years ago.

How do they know?



Astronomers have found out that the universe is getting bigger, like a balloon blowing up.

They know how fast this is happening.

This means they can work out when the universe started from a very tiny, very hot blob.

What made the bang?

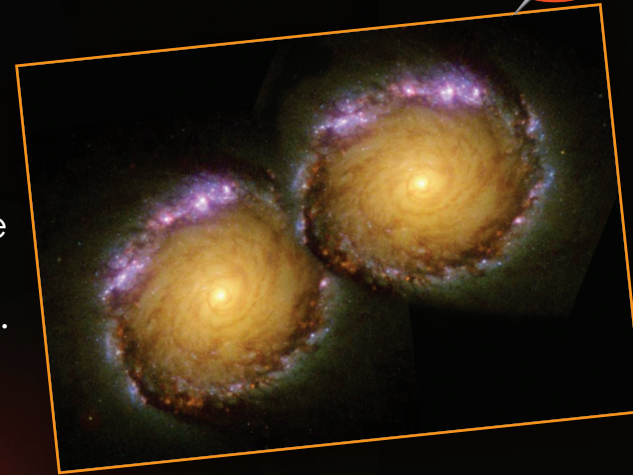
No one really knows.

It could be that when the universe is as big as it can get, it will start to shrink back down to a tiny blob again. (This is sometimes called '**the big crunch**'.)

The blob will go bang and a new universe will start. This will repeat over and over again.

Here's another idea:

Maybe there are other universes, only we can't see them because they are in a different dimension.



Our universe started when two other universes banged into each other.

So when will our universe end?

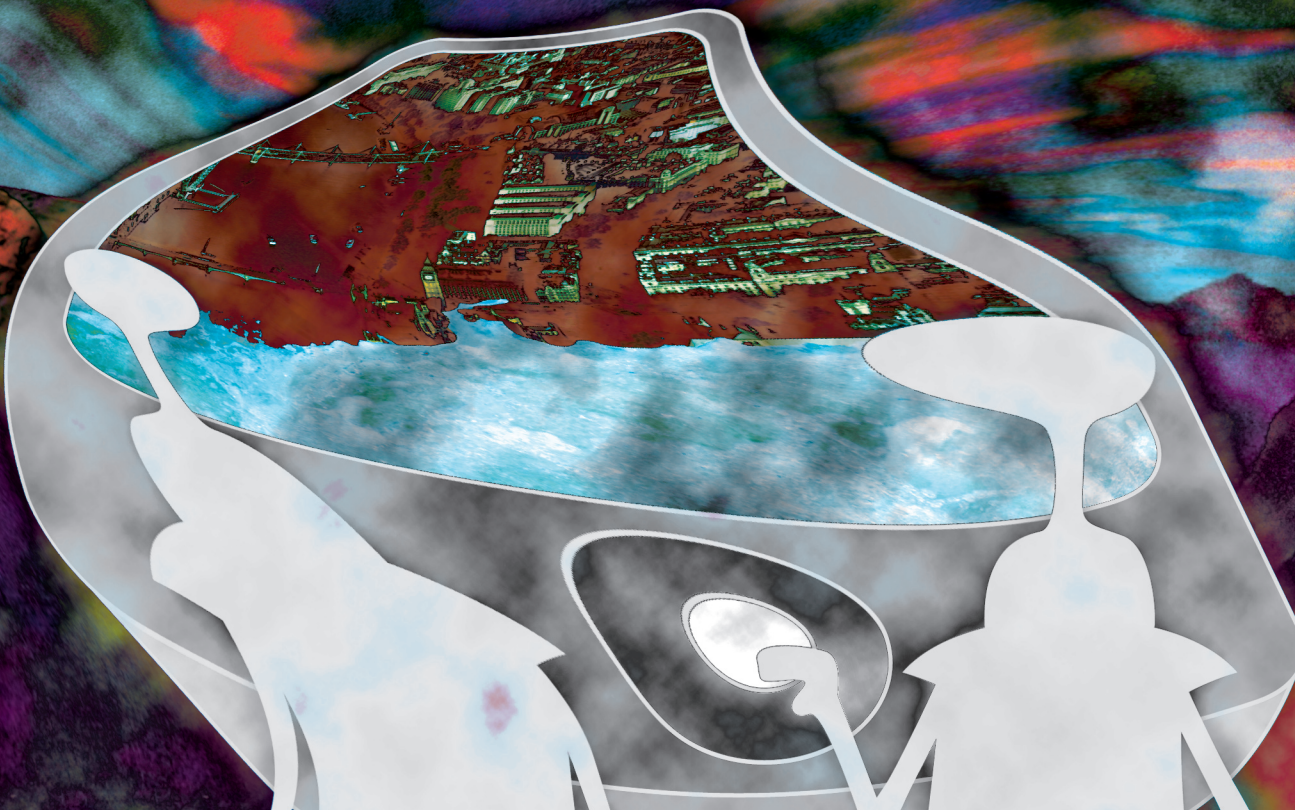
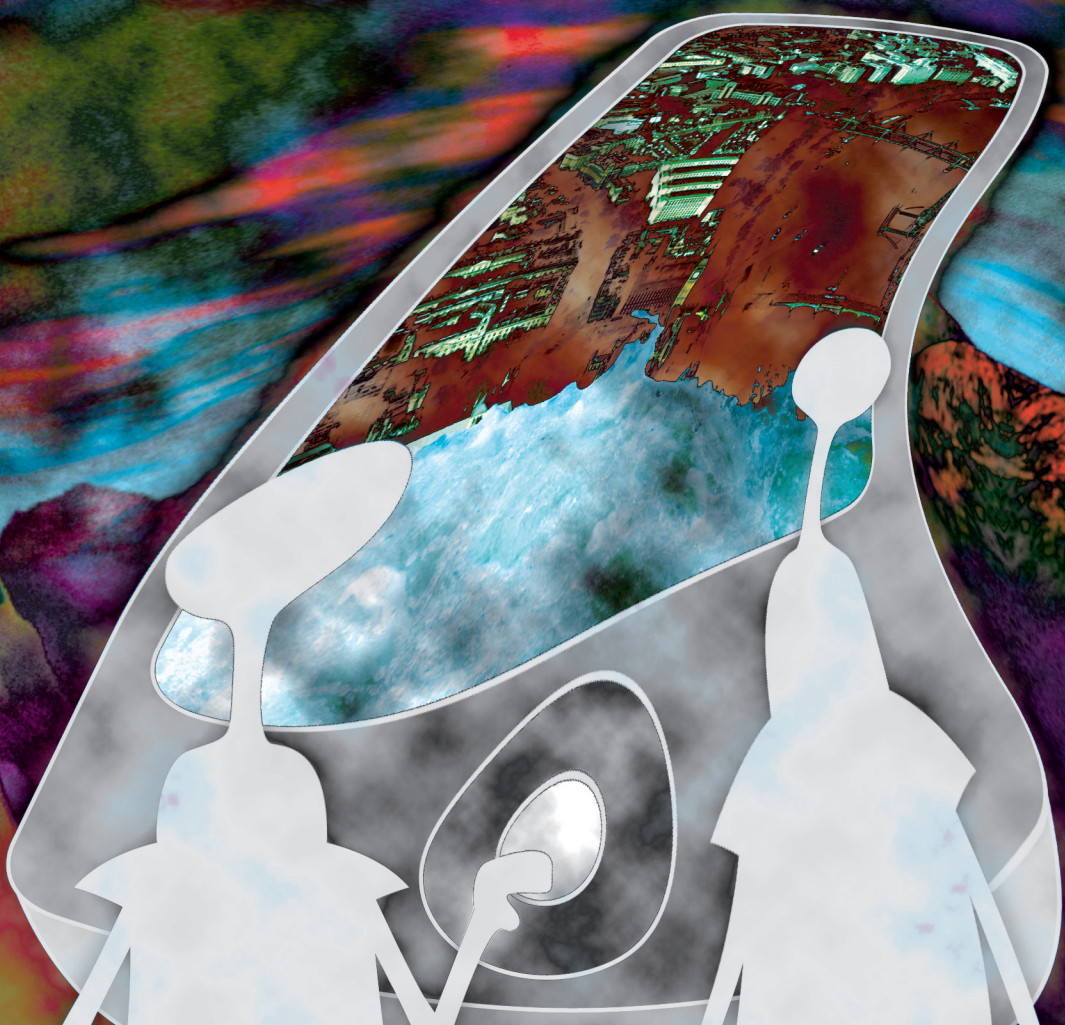
Some scientists say it will go on forever and there won't be a big crunch. The problem will be that the heat in the universe will be spread so thinly that everything will die – **the big freeze**.

What will happen after the end of the universe?

We'll just have to wait and see!



The Man in the Machine



Chapter 1: The world in the computer

Two alien scientists stared at the machine.

“This is the most powerful computer ever,” said 4 Square. “It has got a complete universe in its memory. Look!”

The other scientist stared at a screen. He saw galaxies and stars swirling in space.

4 Square pressed a button. It looked like they were travelling through space. On and on, until they got to a small sun.

Somewhere on a distant planet...

This is the most powerful computer ever. It has a complete universe in its memory!