

HOW DO WE KNOW THE BIG BANG ACTUALLY HAPPENED?

Video transcript: Introduction with Maggie Aderin-Pocock

MAGGIE ADERIN-POCOCK:

People talk about the universe starting with a Big Bang, but how could we possibly know anything about an event that happened billions of years ago – before our planet was even formed?

Even if the birth of the universe came out of the most violent expansion, then could it be possible that evidence of the Big Bang still resounds today?

Such was the force of that expansion that maybe there is evidence of that tremendous energy that we can still detect.

As light takes millions of years to travel the vast distances of the universe, looking out into space is a bit like looking back in time. Could that tell us what the universe was like just after the Big Bang?

By observing how galaxies are moving away from us, we might be able to work out where they came from. Could that tell us that everything started from a single point?

So is it possible to know whether the Big Bang actually happened?