

Daily Meditation 07-19-22

Humanity's Cosmic Awakening: An Astrophysicist Speaks

Good morning.

In today's meditation we consider some of the amazing wonders of the universe, the cosmos, that science is now uncovering, gathered by astrophysicist Joe Primack and philosopher Nancy Abrams. One point they make is that the the earth is immensely dense. They say that

Where the sun orbits on our galaxy's disk, the density is around a million times the cosmic average. But within the solar system itself, it is a billion, billion times the cosmic average. And on earth, the densest planet in the solar system, that density is a trillion times higher still. The average density of the Earth is about four times that of the sun.

And they stress that our universe is amazingly creative.

In the beginning there was, and almost everywhere else there still is, (they write) nothing but creativity, infinite potential, dense and hot. Creativity was wildly experimenting with every possibility that quantum uncertainty permits. There are billions of events per second expanding for every spark point for all eternity, unlimited by the speed of light, or lack of space.

Talk about sparks of creation! This is really what was going on, according to today's science, at the beginning of creation.

And they also stress that our universe is very imperfect. Space time in our universe is full of wrinkles. And that's so important. Quote:

If space time had been perfectly smooth, there would be no galaxies, no stars, no planets, no life, just a thick soup of particles. Life could only ever evolve in an imperfect universe.

Seems like a good place for humans, since we tend to be pretty imperfect from time to time, don't we?

And Primack and Abrams conclude: "We are no longer lost--"

...lost like the modern age was about our place in the universe.

We are no longer lost, we have discovered our place and the new order of the universe.

So that is their conclusion: that we do not have to live in the despair and the uncertainty of the modern thinkers, whether we're talking about John Calvin, or about Bertrand Russell, who said we should build our philosophy "on a foundation of unyielding despair," or Stephen Jay Gould, who said that humans are simply "a fortuitous afterthought," on the part of the cosmos.

That, in fact, humanity is here, among other things, to understand the universe -- "Capax universi" like Aquinas said, to be capable of the universe -- and to praise it, to praise it. And to thank it for bringing us here: after all these amazing billions of years and miles of expansion, our tiny Earth has given birth to marvelous marvelous species, and humanity is, humanity is among those marvelous species.

Thank you, we'll see you tomorrow.