Is the 5th fundamental compatible with science?

Post by “Don” of December 20, 2022 at 7:49 AM

It seems that number comes from here:

https://www.thoughtco.com/number-of-atoms-in-the-universe-60379

and there's this:

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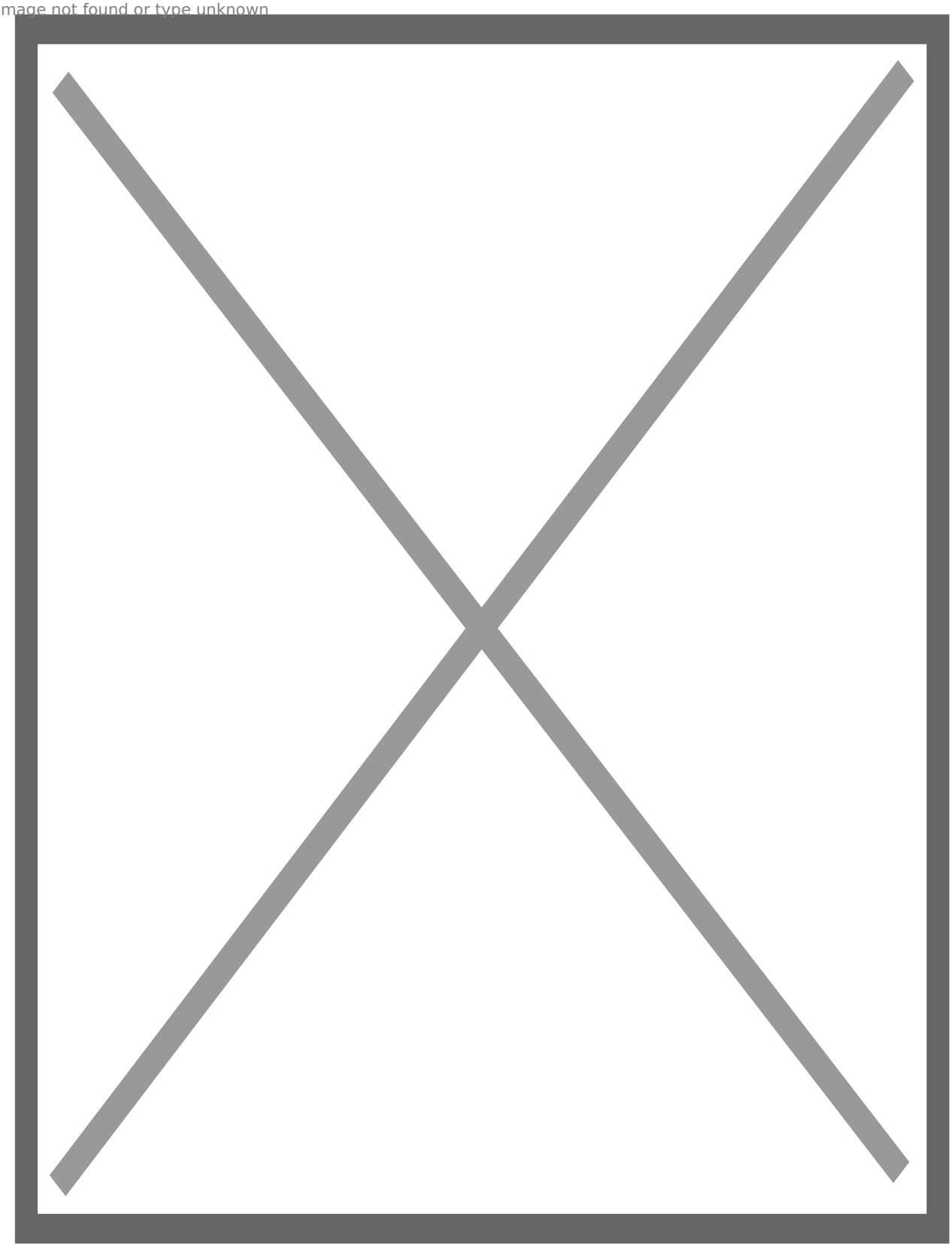

How Many Atoms Are There in the Universe?

It’s no secret that the universe is an extremely vast place. That which we can observe (aka. “the known Universe”) is estimated to span roughly 93 billion…
www.universetoday.com

It's important to look at what that second one says: "And yet, those numbers don’t accurately reflect how much matter the universe may truly house. As stated already, this estimate accounts only for the observable universe which reaches 46 billion light years in any direction, and is based on where the expansion of space has taken the most distant objects observed."

Even so, I don't get my science from a 2,000+ year old text. However, Epicurus was headed in the right direction. For all intents and purposes from a human perspective, the difference between those estimates and "infinity" are academic. The word Epicurus used was άπειρος "without limit" often translated as "infinite."

My perspective on Epicurus's philosophy doesn't rise or fall on determining an unimaginable number of atoms. There are also other cosmos (cosmoi) to consider in the infinite All. When considering that, the number is atoms is unlimited.

PS. There's also the question of how to translate Epicurus's άτομος (atomos) into modern physics. Can we use it to refer to an "atom" as we define it? Is it a molecule? Is it a quark? Meson? Wave function? Again, Epicurus did not have access to our methods and tools, but he "got" that the cosmos is material and composed of matter and had no supernatural origin. That's the important point rather than trying to find a "Gotcha!"

Thanks, @Faunus , for the question!