How to argue against the Kalam Cosmological Argument?

Post by “LAMAR__44” of April 7, 2026 at 6:09 AM

Essentially, it argues that the universe could not be eternal, since this would require an infinite past. And we can’t have an infinite past, because this would require an actual infinite set to be constructed through successive addition of finite elements, since the past is just previously present moments added onto each other. And in the same way you can’t count and reach infinity, only keep counting infinitely, you can’t have an infinite past.

Another way to reframe the argument is that for you to reach the present moment, you’d have to first wait for an infinite number of past moments to occur, which is analogous to waiting for an infinite time to pass, or walking an infinite distance and eventually getting to the end.

I struggle to properly conceptualise infinity, but what is the argument against this?

Post by “Cassius” of April 7, 2026 at 7:49 AM

Sound to me like that's a variation of the Zeno argument that you cannot move or walk across the room because there are infinite steps in between.

Someone else (Joshua) probably can state the response better than me, but Epicurus rejects the argument that matter is infinitely divisible so as to make motion impossible, and that presumably would apply to this question as well.

As to conceptualizing infinity that's an excellent question too. I presume part of the answer there is that it would be more difficult to conceptualize an END to space or number of atoms than it would be to conceptualize unlimited amounts of both. That's the argument that is stated at length in Lucretius Book One at 968 in more detail (including the javvelin argument) than is included in the letter the Herodotus.

Again as with your other question I think you're touching on something where we have at least some relevant information in Philodemus' "On Signs," this time under the heading of "inconceivability."

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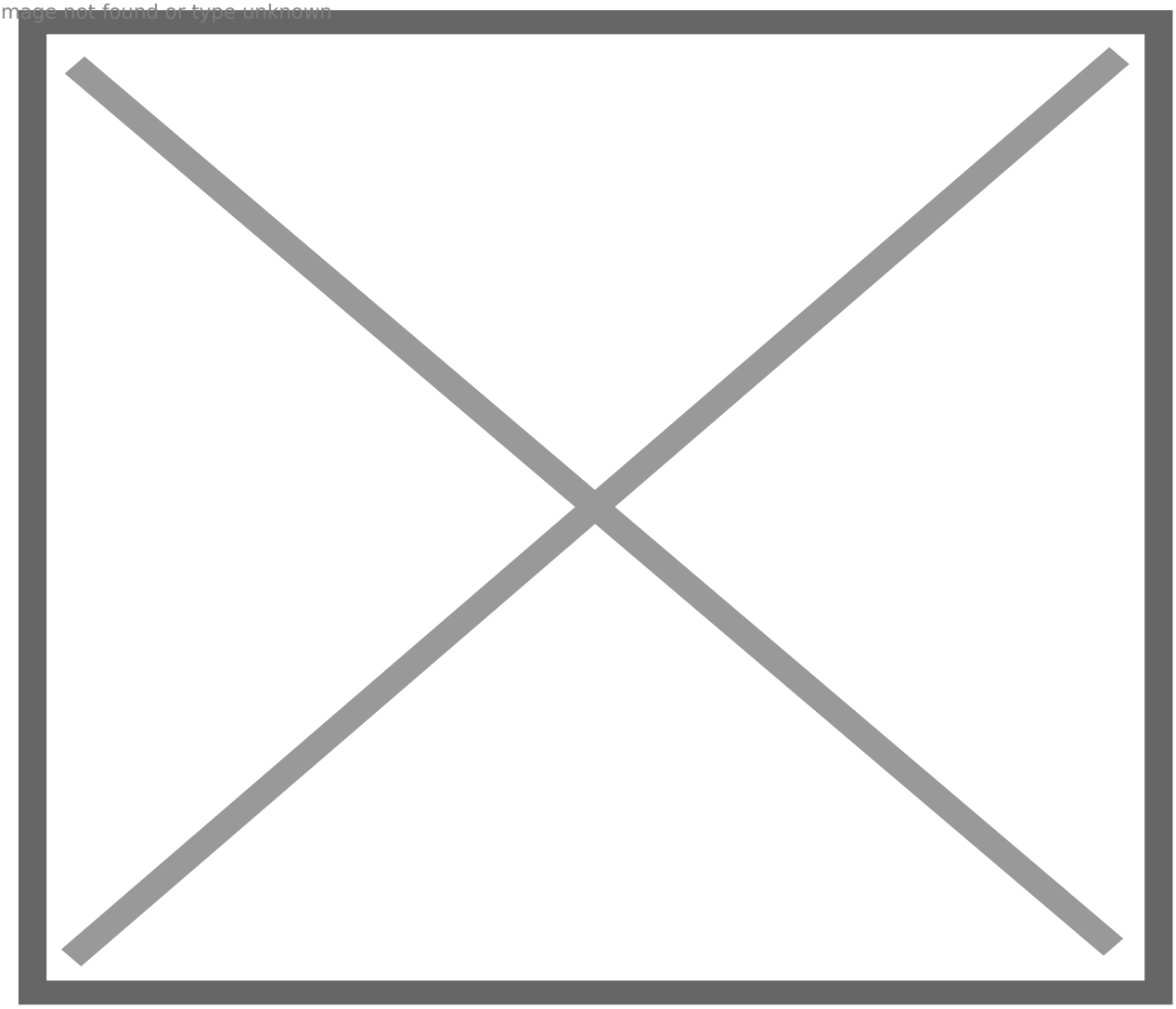

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Post by “Eikadistes” of April 7, 2026 at 10:57 AM

> Quote from LAMAR_44
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> Essentially, it argues that the universe could not be eternal

This point is consistent with Epicurean physics, which teaches that each *kósmos* is temporary.

In the *Epistle to Herodótos*, Epíkouros describes the creation of a *kósmos*: "**concerning the intercepting of the amalgamations out of** [**the**] **beginning of these** [cosmic cycles] **during the generation of a kósmou**" (10.77). Likewise, each *kósmos* has an inevitable end.

Lucretius elaborates on the life cycle of a kósmos. He writes that "**the chiefest members and parts of the world are destroyed and begotten anew, I may be sure that for heaven and earth as well there has been a time of beginning and there will be a time of destruction**. " (5.245)

However, "**the *All* is not destined to be destroyed into non-being**".

We can further flesh out what constitutes a *kósmos* and what constitutes "the All" beyond our own *kósmos.* Epíkouros defines this for Pythoklēs: "[**The**] ***kósmos* is a slice of heaven, encompassing both glowers** [**stars**], [**the**] **earth**, **and all** [**observable**] **phenomena**, [**and**] **containing** [**a**] **partition away from the infinite**". Generally, that definition covers (at least) anything the JWST can measure. "The All", then, is everything in addition to *the aforementioned*. He further writes in the case of "**intercosmic** [**space**] — **I mean the** [**spatial**] **distance between** [**each**] **of the kósmōn, within permeable space, and not** [**as**] **in large, sterile, and empty** [**space**]" (10.88-89).

(I caution anyone from directly translating *kósmos* as either "world" or "universe". These are ancient concepts that do not directly correspond to our own, technical definitions.)

> Quote from LAMAR__44
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> we can’t have an infinite past, because this would require an actual infinite set to be constructed through successive addition of finite elements, since the past is just previously present moments added onto each other. And in the same way you can’t count and reach infinity, only keep counting infinitely, you can’t have an infinite past.

I may not understand this correctly, so I apologize in advance. I'm speaking personally here, but I disagree with this on the premise of Karl Popper's delineation between verification versus falsifiability. Verification says that we have to experimentally verify things for statements to be true. Karl Popper says this is limited. Let's use the proposition that *all swans are white*. You don't need to capture and record every single swan. You just need to find one black swan.

We don't need to map infinity (which would be logistically impossible, as it keeps stretching every way), all we need to do is find a point where "the All" begins. When you find that, please let us know. I guarantee that you will be awarded a Nobel Prize in Physics.

In a fashion, the above process is loosely related to how Epíkouros argues. Here is a familiar approach to his reasoning. '*I observe A to be the case. If A were not the case, then B would be*

the case. Since we do not observe B, then A is the case'. In this regard, Epíkouros might argue that "If 'the All' has a beginning, then we'll find a beginning. Or, perhaps we'll find an end. Thus far, no compounds have ever popped into existence in front of our eyes without a preceding cause, and, likewise, reality has never collapsed into pure nothingness while we were in it, so the notion that the intercosmic void (in which *kósmoi* develop) has a hard beginning, or a hard end has not been observed, and would contradict the fact that every compound anyone has ever observed comes from something else.

> Quote from LAMAR__44
>
> Another way to reframe the argument is that for you to reach the present moment, you'd have to first wait for an infinite number of past moments to occur, which is analogous to waiting for an infinite time to pass, or walking an infinite distance and eventually getting to the end.

This strikes as a sort of modern analogue to the Eleatic argument by Zeno and others that we receive as the old "Tortoise and the Hare" story. (I just realize that Cassius mentioned this above, so I know apologize for the redundancy). The Eleatics set out to prove that motion was impossible through the concept of infinite divisibility. So they argue, to get from A [start] to Z [finish] you have to pass through B [mid point]. To then get from B from Z, you have to get to C, *ad infinitum*. Thus, to get to Z [finish], you have to pass through an endless series of mid-points, and *you can't*.

We Epicureans disqualify this entire argument by simply walking to Z. *You can*.

Likewise, skeptical speculation aside, we know we exist because we feel things, so we have to assume that our existence, which is real, comes from a previous state, because, observably, things have never popped into existence like in *I Dream of Jeanie*. If compounds could randomly pop into existence without a preceding cause, then we might have observed it by now.

I'm about to talk out of my league (Martin), but just writing from a philosophical perspective, even if contemporary particles are modeled as 0-dimensional points that condensed from a hot soup of early universe, or some kind of intersection between energetic fields, or that space is a continuum of entangled particles, or that cosmology eventually finds a sort of Moment Zero, the way humans study nature, as soon as we identify Moment Zero, we'll start looking for Moment -1.

Like I said though, if anyone finds some kind of Moment Zero to "the All" itself, please let us know! Epicureans take observational evidence very, very seriously. But, here again, it might be better not to use ancient categories to organize the concepts we derive from modern observations.

Post by “Cassius” of April 7, 2026 at 11:20 AM

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And I agree with Eikadistes there Lamar_44. Eikadistes is using what is apparently the current terminology. I use the terminology I grew up with - "*universe means everything - the all.*" As I read it we end up in the same place.

> Quote from Eikadistes
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> I'm speaking personally here, but I disagree with this on the premise of Karl Popper's delineation between verification versus falsifiability. Verification says that we have to experimentally verify things for statements to be true.

This is a recurring theme of some recent discussions here. Call it a matter of terminology or whatever, but I (and I think Epicurus and those who followed him on canonics did so) maintain that it is ridiculous to assert that before you can "know" something you must have "*been there done that yourself.*"

> Quote from Eikadistes
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> But, here again, it might be better not to use ancient categories to organize the concepts we derive from modern observations.

And I would say that it also would be better not to let modern observations cause us to lose sight of ancient categories when those categories still serve a useful purpose and those categories are not comprehensively contradicted by those modern observations.

For example I would say that just because the observable universe appears to be expanding, that does not compel us to conclude that the universe as a whole is not infinite in size or eternal in time. Some disagree, but I think those conclusions remain logically persuasive. And if you say "no the universe is neither eternal nor infinite" then the practical result is not "truth," (which the "no" chorus does not advocate for anyway) but the opening of the door to the

presumption that 'god' is what existed *before* the universe (it if came into being at some point) or *outside* the universe (if the universe is not infinite in size).

Again, not everyone here agrees with my point of view on that, but (1) as far as I can tell that is what Epicurus held, and (2) the position that Epicurus held is of far greater understandability and practical benefit for non-specialists than the unending and unverifiable speculation that many want to substitute in its place.

If someone disagrees with my reading of Epicurus, please be sure to correct me.

Thanks to Eikadistes for an excellent post.

Post by “Don” of April 7, 2026 at 4:00 PM

> Quote from Eikadistes
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> (I caution anyone from directly translating kósmos as either "world" or "universe". These are ancient concepts that do not directly correspond to our own, technical definitions.)

Amen.

Post by “LAMAR__44” of April 7, 2026 at 8:43 PM

I feel as this situation is different to Zeno’s paradox. I believe Zeno’s paradox is actually true, in the sense that if you agree with the premise that space is infinitely divisible, then motion is impossible, however, clearly motion is possible, so Zeno’s paradox actually proves by contradiction that space is finitely divisible or discrete (I have some confusions about thinking about the universe as discrete but that’s a topic for another day, but I think it’s much better at explaining reality than a continuous universe). Here’s a good video I recommend everyone watch https://m.youtube.com/watch?v=iU59S5JDpSU

Now the reason why I think this situation is different to Zeno’s paradox, is that we solve Zeno’s paradox by saying “well you can’t actually traverse an infinite number of points, so space isn’t infinitely divisible”, but for the infinity of the past, we are saying that there are an infinite number of discrete points (moments) that have been traversed.

We either have to accept that an infinite number of points can be traversed, which sort of undermines Epicurean physics that reality is made of discrete matter and time, or say that the past is a finite number of points, which undermines the eternality of the universe.

However, I am sure I’m thinking of something wrongly here, so don’t take this as an attack on Epicureanism.

Post by “Cassius” of April 7, 2026 at 9:05 PM

Presuming first that we are communicating as to "universe" meaning "the all" and not just "our universe" then I'd go back to the very first part of your first post.

> Quote from LAMAR__44
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> Essentially, it argues that the universe could not be eternal, since this would require an infinite past.

I doubt Epicurus would go much past that without stating that "the universe / the all" must be eternal, because it is inconceivable that there was ever a time in which "the all" did not exist. It certainly appear to us that the we exist, and that it makes no sense to consider that there was ever a time that the all did not exist, so I would rule out of hand any supposition (it would require an infinite number of steps to get here and that's not possible) that conflicts with what all appearances tells us does exist.

I'm sure someone here can probably do better than that for an answer but any fundamental logical paradox like that has to be resolved in the end by relying on the apparences (sensations) which in the end are all we have as contact with reality. The mind can image all sorts of constructions that defy reality, but devotion to what nature has given us is why in the end we go with sensations and not with pure logic that ultimately cannot be reconciled with the senses.

Post by “LAMAR__44” of April 7, 2026 at 9:40 PM

> Quote from Cassius

> I doubt Epicurus would go much past that without stating that "the universe / the all" must be eternal, because it is inconceivable that there was ever a time in which "the all" did not exist. It certainly appear to us that the we exist, and that it makes no sense to consider that there was ever a time that the all did not exist, so I would rule out of hand any supposition (it would require an infinite number of steps to get here and that's not possible) that conflicts with what all appearances tells us does exist.

Yes, I am going to use the universe to refer to “the all that exists”.

Well I guess I’m going to introduce wordplay that people who believe the Big Bang in the beginning do, so forgive me haha.

But I guess we could say that there was never a time where the universe didn’t exist, because if there is a finite amount of time in the past, the time before the first moment isn’t actually a moment in time. So the time before the universe didn’t exist, so in all moments of time the universe existed.

Post by “Martin” of April 8, 2026 at 3:01 AM

> Quote
>
> Here’s a good video I recommend everyone watch

No, it is a bad video which you should not waste your time to watch (unless you are into refuting nonsense statements on mathematics and reality.) Moreover, it is far out of the scope of our site.
Steve Patterson presents a string of truthful statements mixed in with nonsense. Among other falsities, he makes the claim that his mathematical nonsense proves something on our reality, like Plato. Mathematics is a useful tool to describe reality but not the other way round, that mathematics prescribes reality. That is already enough to refute the Kalam cosmological argument as well.
Where can I reimburse the 14 minutes which I wasted on that video?

Post by “Cassius” of April 8, 2026 at 6:33 AM

@Lamar_44 I note Martin's comment and as soon as I have time will watch that myself.

What conclusion do you reach based on that video?

The entire question of imagination and thought experiments definitely has interest for some people. If Zeno wants to imagine infinite divisibility and construct hypotheticals based on it, then in a free world he has a right to do that, and if it gives him pleasure then more power to him.

I see that the video starts out asking whether a series of math statements getting increasingly smaller really "equals" zero, and the obvious answer is that of course it doesn't because you're defining the question in a way that doesn't mean exactly the same thing as zero.

Do such experiments have practical uses? Probably so - math has lots of practical uses.

But if the purpose of thought experiments is to confuse other people and make them doubt practical reality, then that is not just innocent fun and games, but harmful to real people.

Where do you see all this going and what benefits derive from exploring the things that people can imagine without first establishing that what they imagine is real?

Post by “Cassius” of April 8, 2026 at 6:50 AM

OK i have watched the video and now I have another way of asking my last question:

1. Lamar_44 thinks the Patterson video is "good" and useful.
2. Martin thinks the Patterson video is a "bad" and a waste of time.

What explains the very different reactions to the video between two people who (by virtue of being here at EpicureaFriends) presumably look at basic issues of reality from a somewhat similar perspective?

Maybe that's just another way of asking the same question, or maybe that's more interesting and more useful for forum purposes than the question presented in the video itself.

Post by “Cassius” of April 8, 2026 at 7:04 AM

As to the work of Steve Patterson outside the video, I can save people some time about where he stands:

Coming Around to Platonism – Steve Patterson