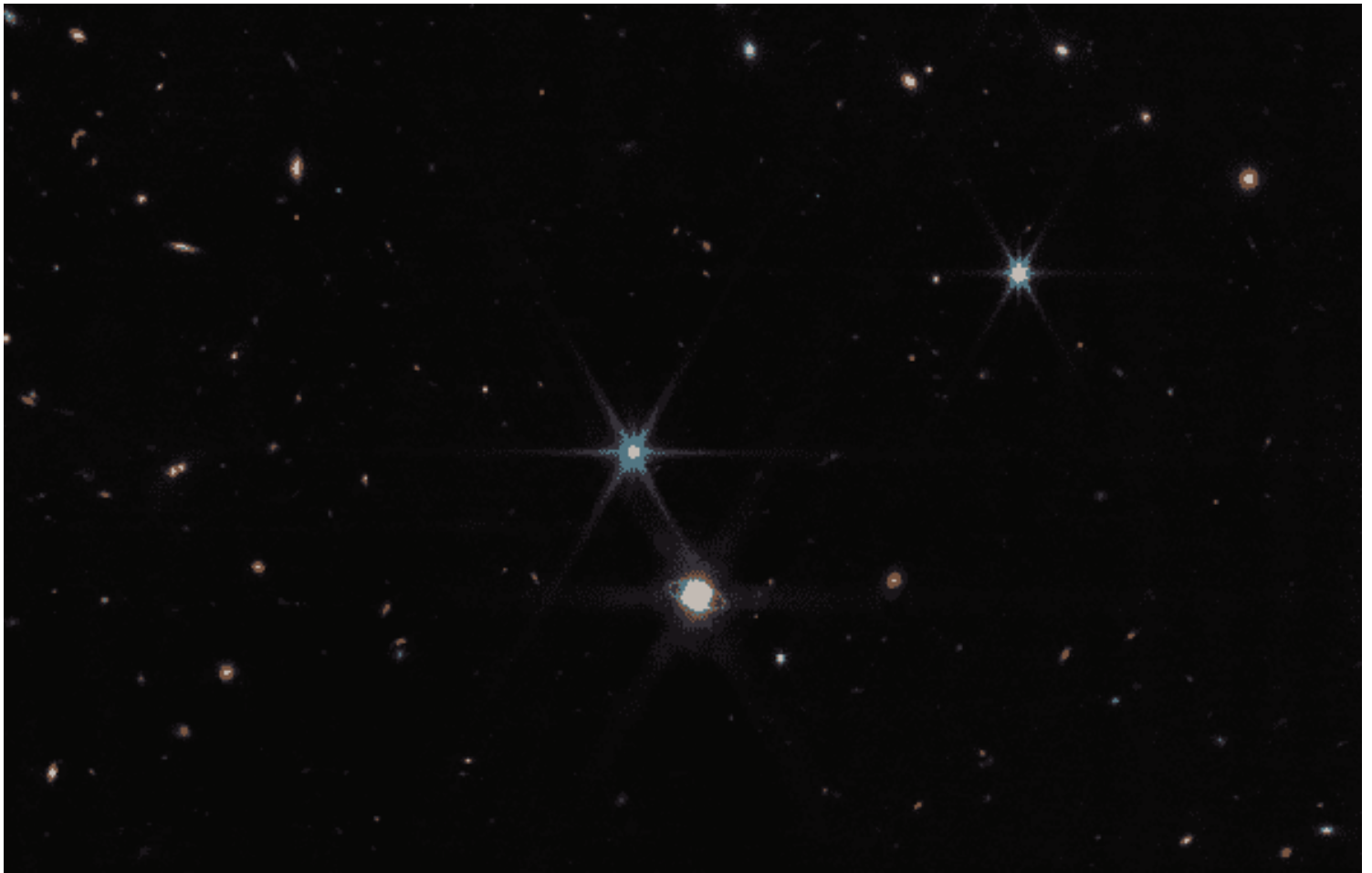


DISCOVERY OF GALAXIES TOO OLD FOR BIG BANG

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“We expected to find tiny, young, baby galaxies at this

point in time, but we've discovered galaxies as mature as our own."

Category: [Essay](#)

Tags: [Big Bang](#), [cosmic origin](#), [Eric Voegelin](#), [galaxy](#), [James Webb telescope](#), [Nicholas of Cusa](#), [scientific revolution](#), [Walt Whitman](#)

Peering into light from the early eons of our universe, when only 3% of its present age had elapsed—a time far closer to the Big Bang than we are—the James Webb space telescope in 2022 was [faced with](#) what was thought to be an impossibility: [six massive galaxies](#), altogether more ancient than they should be.

"Universe breakers," some have called them, requiring, as they do, that we account for them by revising existing models in some way. Joel Leja, assistant professor of astronomy and astrophysics at Penn State University, described the venerable patriarchs of a universe older than we had fathomed as:

Way more massive ... than anyone expected ... We expected to find tiny, young, baby galaxies at this point in time, but we've discovered galaxies as mature as our own in what was previously understood to be the dawn of the universe.

In the same vein, Dr. Erica Nelson of the University of Colorado Boulder, candidly referred to the discovery as "bananas," specifying that "these galaxies should not have had time to form."

Illustration of the James Webb Space telescope. *Credit: NASA GSFC/CIL/Adriana Manrique Gutierrez*, Webb Space Telescope Resource Gallery, <https://webbtelescope.org/contents/articles/webbs-first-images>

It sometimes seems that the modern scientific establishment has in common with certain literalist religionists a yearning for the closure of a specific, closed beginning to the cosmological story.

Indeed, that establishment has recently tried to proscribe debate and prematurely come to definite conclusions, making very definite, corresponding policy recommendations, from the Green Transition to mass COVID-19 vaccination.

Eric Voegelin warned against the desire of the conqueror to find the *finis mundi*, to have the whole earth at his back and establish his realm at its edge once and for all; to seal reality off once and for all.

But closure is an inward endeavor. Absolute truth and the principles underlying reality are not empirically measurable quantities; they are stations of philosophical and spiritual insight. It is when we accord with these inner truths that outward reality is seen aright, and a true understanding of its systems is obtained.

Such was the Early Modern insight of theologian and astronomer, Nicholas of Cusa, for example: that there is no ultimate terminus to contingent reality, either spatial or temporal, and that our universe, the specific space-time we inhabit, although delimited, might be contained within wider wholes that exceed it, for no single creation can exhaust God's creativity. Even a miracle, a *sui generis* cause which—so far as our perception is concerned—does not rest on any other but gratuitously initiates some effect, cannot by virtue of its gratuity be understood to be wholly unique, for it may occur in the context of wider circles of miracle. And again, the One who performs miracles is never exhausted in any act.

In his *[From the Closed World to the Infinite Universe](#)*, Alexander Koyré's describes Nicholas of Cusa's epiphany:

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Neither the earth, nor anything else, can be placed in this centre, which does not exist, and thus nothing in this world can be completely and absolutely at rest.

Rest belongs to principles, to the Logos that harmonizes created forms, not to those forms in their outwardly observable, physical existence. Professor J.Y. Simpson [wrote](#) that “other stars may have their Bethlehem, and their Cavalry too.” Describing the same vision, Henry Corbin [referred](#) to Avicenna’s metaphysical system as “a decentralization of the monotheistic universe.”

And for his part, the American poet Walt Whitman wrote in *Leaves of Grass*, “Song of Myself,” as if anticipating this recent discovery by the James Webb telescope:

I open my scuttle at night and see the far-sprinkled systems, And all I see multiplied as high as I can cipher edge but the rim of the farther systems.

Wider and wider they spread, expanding, always expanding, Outward and outward and forever outward.

My sun has his sun and round him obediently wheels, He joins with his partners a group of superior circuit ... There is no stoppage and never can be stoppage ... And surely go as much farther, and then farther and farther.