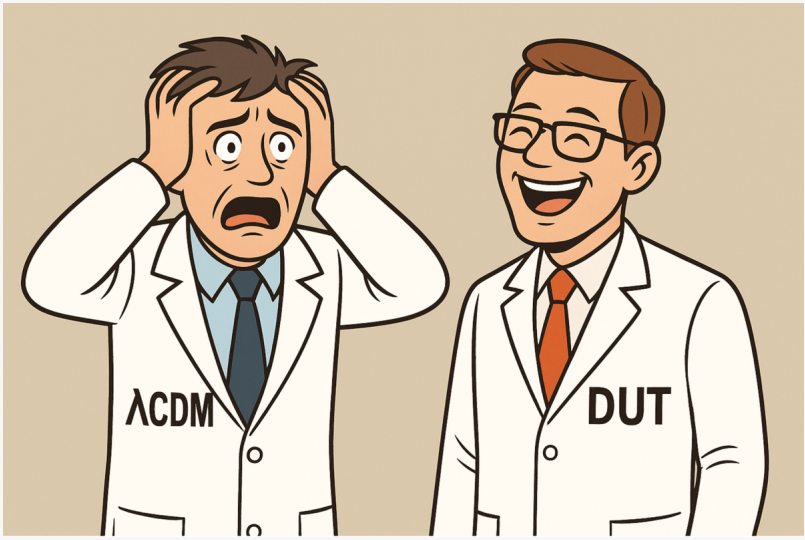
ExtractoDAO Labs simulation predicts cosmic structures 2 billion years before the Big Bang that may be observed

Simulations by ExtractoDAO Labs suggest the universe exists in a continuum, extending its age to 15.8B years — 2B before the Big Bang.



DUT Quantum Simulator interface: a decentralized scientific tool for testing cosmological hypotheses based on non-singular geometries and unified general relativity.

CURITIBA, PARANá, BRAZIL, September 2, 2025 /EINPresswire.com/ -- DUT Quantum: Advanced Cosmological Simulation Technology Created by ExtractoDAO Labs Predicts Structures Formed 15.8 Billion Years Ago, i.e., 2 Billion Years Before the Big Bang

The James Webb Space Telescope has left the scientific community increasingly uncomfortable, breaking record after record in the discovery of galaxies in the deep universe, at high redshift, and creating serious problems for the old ΛCDM model. The ΛCDM framework can no longer explain the existence of mature, well-formed galaxies that should not exist. In fact, what has happened is that the model failed in its dating of 13.8 billion years, and there is no way to fix it: the model can no longer be patched.

Since the discovery of supermassive black hole structures with more than 30 billion solar masses, scientists working within the ΛCDM paradigm should have raised the alarm. Instead, they tried to patch the model by classifying them as “cosmic seeds.” New theories have emerged, proposing that perhaps the Big Bang never happened, that the universe collapsed from cosmic dust clouds, or that it originated from black holes. However, none of these proposals truly explain what needed to be addressed: did the observable universe have an absolute beginning or not?

On the other hand, researcher Joel Almeida spent about three years working with his development team while also writing a new theory that would not only explain the universe’s

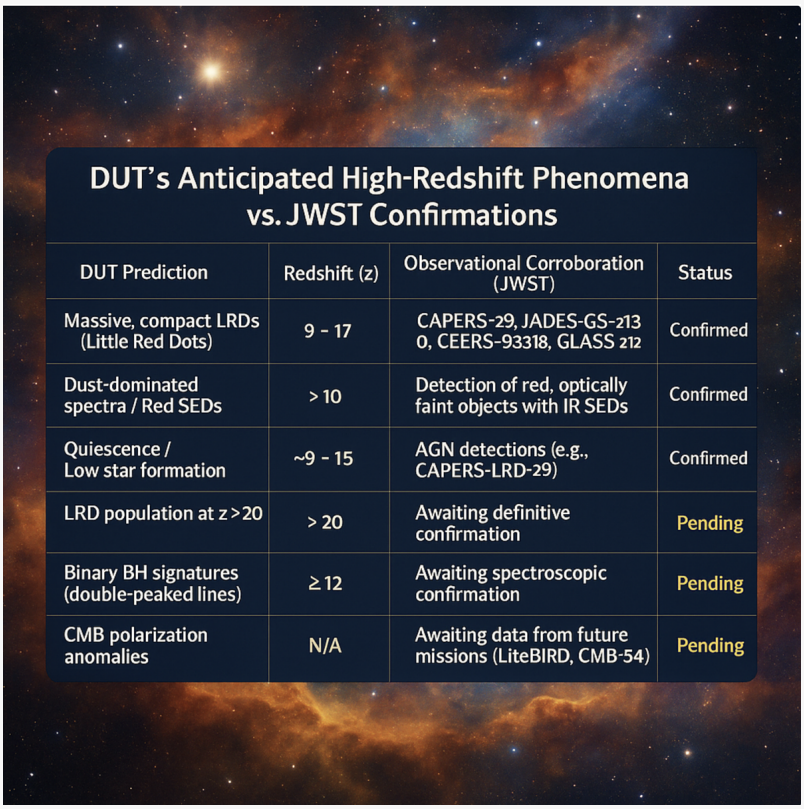
past but do so through advanced code and simulations capable of producing results with unquestionable precision. The first results came with the accurate anticipation of the existence of the so-called “Little Red Dots.”

Based on the article Small Red Dots and the DUT Framework, the DUT Quantum Simulator anticipated, prior to JWST observations, the following key properties of Small Red Dots (LRDs or SRDs for DUT, https://zenodo.org/records/16879286):

High masses: 10^6–10^8 M☉, already within the first 200–300 Myr.

Quiescent environment: extremely low star-formation rates, in contrast with the ΛCDM scenario.

Dust obscuration: compact nuclei detectable only in the infrared.



"Previsões da Dead Universe Theory (DUT) comparadas com observações confirmadas e pendentes do Telescópio Espacial James Webb (JWST)."

Infrared spectrum: dominant emission at 2.5–5 μm, with no strong high-ionization lines.

> We are delivering 76.8 billion years of simulations, marking the onset of the high fossilization phase, within a continuum universe projected to 180 billion years — redefining cosmology’s future.”
>
> *oel Almeida, Research Leader, ExtractoDAO Labs*

Stable and non-singular structure: persistent nuclei regulated by entropic potentials.

These characteristics were simulated and published with DOI months before independent JWST confirmations in objects such as CAPERS-LRD-z9 (z = 9.28; Taylor et al.), JADES-GS-z13-0 (z ≈ 13.2), and CEERS-93316 (z ≈ 16.7).

Since March 15, 2025, executions of the DUT Quantum Simulator had already anticipated the existence of compact red sources at z ≈ 9, including morphological and spectral properties that were later reported for CAPERS-LRD-z9 by Taylor et al. From a cosmological interpretation standpoint, z ≈ 9 and z = 9.288 are equivalent within the margins of uncertainty; however, the

latter value was only presented in a subsequent study, without prior documentation of the applied methodology or reproducible data that transparently demonstrated how the result was obtained.

“The question is not just to say that they exist, but to describe their characteristics, masses, sizes, and properties. This is very difficult to achieve with simulator technologies like NASA’s. Otherwise, if they could do it, why haven’t they? Fear of being wrong? Whoever fears error is not delivering scientific verdicts. A technology that does not expose itself to the possibility of being wrong should not be used for serious science. All simulators developed by ExtractoDAO are free, open-source, and the simulations are available online for the scientific community to analyze and either validate or reject. That is part of science.”
(Eduardo Rodrigues – CEO and Researcher, ExtractoDAO)

The new simulations are now available, predicting the existence of mature and forming galaxies as early as 30 million years after the Big Bang. Furthermore, new advanced modules, already partially published, demonstrate the existence of structures at 15.8 billion years, i.e., 2 billion years before the Big Bang. These simulations will be made available in several repositories for validation as JWST data continues to arrive:

https://zenodo.org/records/17025329

https://zenodo.org/records/16994153

In other words, no matter how far the JWST points its lens, nor the variety of data it reveals, all of these findings will, as much as possible, be interpreted or even anticipated by the DUT Quantum Simulator for the scientific community.

The DUT successfully anticipated the existence, general properties (high mass, compactness, dust, quiescence), and the redshift range (z ~ 9 to z ~ 17) of the population of sources now known as Little Red Dots (LRDs), observed by JWST. The timestamped pre-registration on Zenodo, prior to official confirmation publications, is a strong indicator of the predictive power of the theory.

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