



Report August 17, 2022

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- Preliminary Success in Tests of Improved Switch Design
- Article Breaks Story: JWST Shows Big Bang Never Happened
- Breaking through the Cosmological Censorship
- Wefunder Capital Campaign Closes in on \$200,000

Preliminary Success in Tests of Improved Switch Design

LPPFusion got encouraging results from preliminary tests of a revised switch design. The research team tested a redesigned switch on the new single-capacitor Testbed that LPPFusion Research Scientist Syed Hasan built from our spare capacitor and our old vacuum chamber.

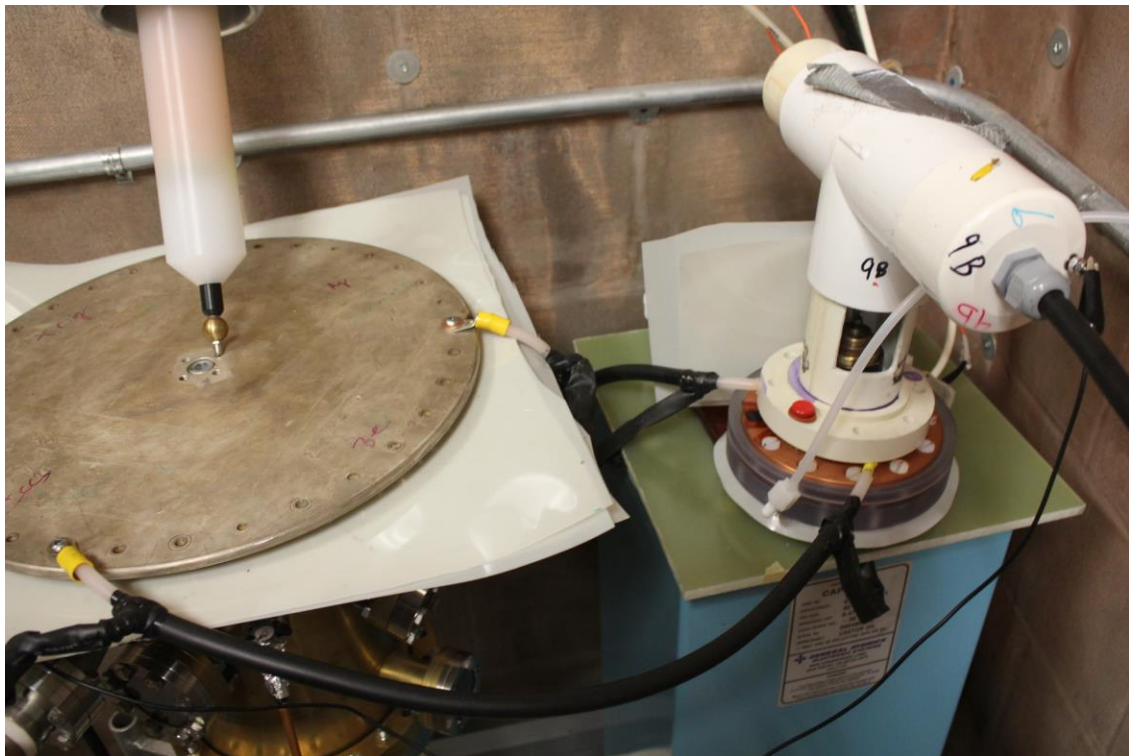


Fig. 1 LPPFusion's new Testbed can greatly accelerate our switch redesign. Shown here is a test of a single switch (plastic cylinder with copper top). The switch is charged by the spare capacitor (large blue object) and triggered by the brass and copper spark plug seen inside the white plastic trigger head. Current from the switch flows through the black coaxial cables to the silver-coated steel anode plate (large circle) which releases an arc harmlessly inside the spare vacuum chamber (seen beneath the Mylar sheets). A high voltage probe (vertical cylinder) measures the pulse, as does an optical fiber on the back side of the switch.

We initially tested a single switch of the pair that is to be mounted on each capacitor. We were testing to see if our new [45-degree angle design](#) eliminated the surface breakdown and pre-firing that had prevented us from reaching good firing conditions with the previous switch design.

The test showed that if, and only if, we had an air-tight seal of the Teflon insulator to the copper electrode can we eliminate the pre-firing and the surface breakdowns. Fortunately, Teflon is elastic enough that it can stretch over the copper just like an O-ring. With this good seal, we were able to fire the switch at the 40kV charge we have been using for the main shots.

The test also gave preliminary assurance that with the surface breakdowns eliminated, we can get repeatable enough firing so that we can coordinate each pair of switches within a nanosecond or two—close enough so that one switch firing won't prevent the other one from doing so.

The next step, which we intend to take soon, is to have two switches firing together on the test bed. If all goes well, we will order the final parts for all 16 “Mark 2” switches and get them by early September.

Article Breaks Story: JWST Shows Big Bang Never Happened

The Big Bang didn't happen

What do the James Webb images really show?



11th August 2022



Eric J. Lerner | President and Chief Scientist of LPPFusion. He is the author of *The Big Bang Never Happened*.

2,413 words

Read time: approx. 12 mins

“The Big Bang didn't happen: What do the James Webb images really show?” reads the headline in a news [article](#) on the high-profile Institute of Arts and Ideas (IAI) website. The article, published Aug.11 and written by LPPFusion Chief Scientist Eric Lerner, is the first reporting in any news media that **the images from the James Webb Space Telescope (JWST) are blatantly and repeatedly contradicting the Big Bang Hypothesis**. While news media are widely reporting how surprised cosmologists are by the images, this article is the first to explain why cosmologists like Allison Kirkpatrick are [“lying awake at three in the morning and wondering if everything I've done is wrong.”](#)

The article is a first big step to opening up a long-overdue debate over the validity of the Big Bang idea that the universe began 14 billion years ago in an incredibly hot, dense state and has been expanding ever since. For years, as the evidence built up against the theory, supporters simply ignored those who said the theory was way

overdue for rejection. But the growing flood of JWST findings are changing that.

A second step in launching this debate will occur next month, when the **IAI will host a [debate on Cosmology and the Big Bust , asking “Is it time to give up the Big Bang altogether?”](#)**. Participants will include Lerner, philosopher Bjorn Ekeberg and Yale cosmologist Dr. Priyamvada Natarajan. The debate will be part of IAI’s festival [HowTheLightGetsIn](#) to be held in London Sept.17-18th. The IAI is particularly appropriate for the debate as its goal is “to challenge the notion that our present accepted wisdom is the truth. “ In addition to the in-person audience, the debate will be seen on [IAI-TV](#) and will be available on [their website](#).

In the IAI article Lerner emphasized the connection between the debates about the cosmos and technology here on earth. **“To use fusion energy, the power that drives the universe and gives light to the Sun and all the stars, we need to understand the processes that drive cosmic evolution,**” Lerner writes. “Just as the Wright Brothers developed the airplane by studying how birds controlled their flight, so today we can only control the ultra-hot plasma where fusion reactions occur by studying how plasmas behave at all scales in cosmos.” To understand the cosmos, free debate has to sweep aside the straitjacket of the Big Bang, he emphasizes.

As described in [previous LPPFusion reports](#), Lerner and colleague Riccardo Scarpa of Instituto de Astrofisica de Canarias predicted in a paper published online what the JWST would see that would contradict the Big Bang and confirm that the universe is not expanding. Specifically, that paper predicted that JWST would see NO evidence for an optical illusion that is inevitable if the universe is expanding—namely that, beyond a certain point, objects look bigger, rather than smaller, in the sky with increasing

distance. Another way of putting this illusion is that objects' surface brightness (their apparent brightness divided by their apparent area in the sky) would decline sharply with increasing distance, and thus increasing redshift. Instead, Lerner and Scarpa predicted that surface brightness would remain constant, just as it does in ordinary non-expanding space. This prediction had been borne out by Hubble Space Telescope (HST) images and the two researchers were certain that they would also be borne out by JWST images.

That is exactly what has occurred. In figure 2 we plot the latest published observations of the surface brightness of galaxies versus their redshifts. The dots at redshifts below 5 come from HST observations, the others are new ones from JWST. Despite the large scatter, it is clear that the surface brightness of the galaxies is exactly the same at high redshift as at lower redshift, exactly as predicted by the non-expanding hypothesis.

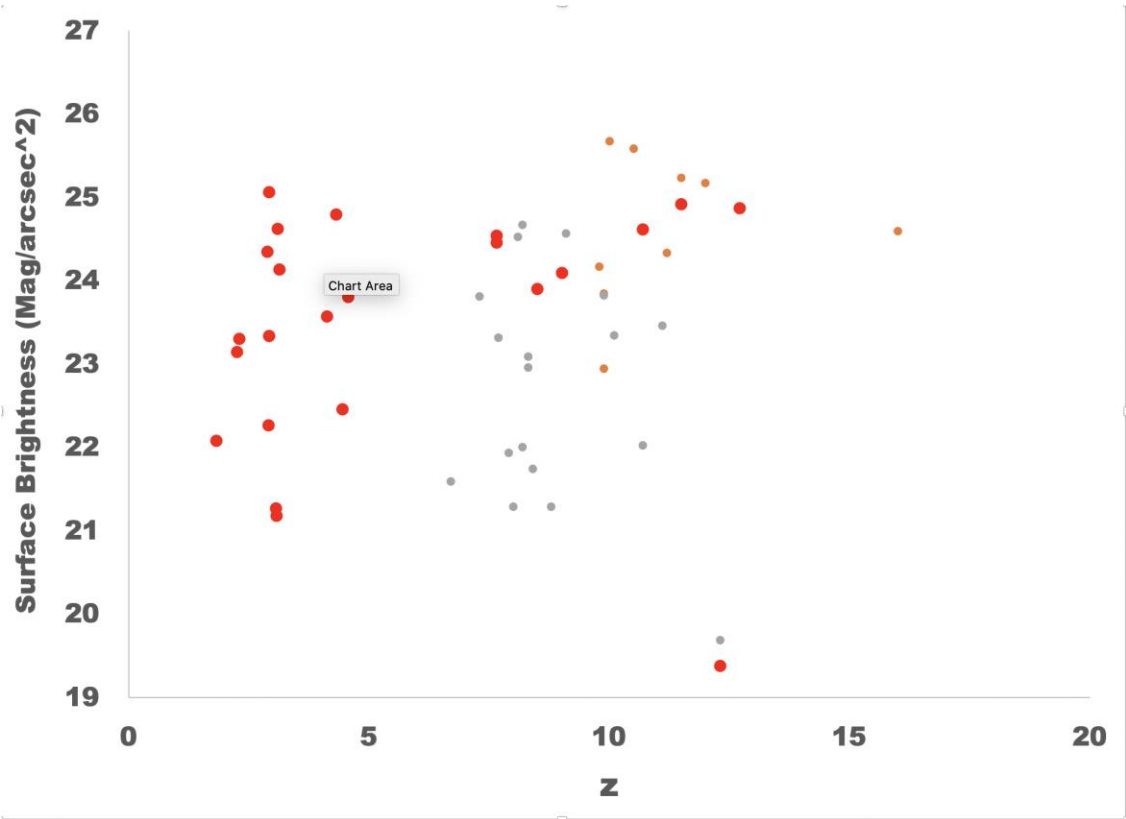


Fig. 2 Surface brightness of galaxies is plotted against the redshift, z . Surface brightness remains the same, as in ordinary, non-expanding space, just as Scarpa and Lerner predicted. The different colors represent different teams of observers. The red and grey dots in the lower right are two teams measurements of the same galaxy, showing good agreement. The rest of the dots have no duplicate galaxies.

But from the standpoint of the Big Bang, expanding-universe hypothesis, these distant galaxies must be intrinsically extremely tiny to compensate for the hypothesized optical illusion—implausibly tiny. One galaxy noted in published [papers](#), called GHZ2, is far more luminous than the Milky Way, yet is calculated to be only 300 light years in radius—150 times smaller than the radius of our Milky Way. Its surface brightness—brightness per unit area-- would be 600 times that of the brightest galaxy in the local universe. Its density (and that of several other galaxies in the new images) would be **tens of thousands of times that of present-day galaxies.**

Breaking through the Cosmological Censorship



These and several other major contradictions with Big Bang predictions are described in [Lerner's IAI article](#), written for a broad audience. Lerner and Scarpa will be preparing a technical version of these contradictions in a forthcoming paper to be submitted to a leading peer-reviewed journal.


They hope it will fare better than the prediction article itself did. That article not only was **rejected without review by the leading journal Monthly Notices of the Royal Astronomical Society (MNRAS)**, they could not even get it posted on arXiv, a **preprint website that is not supposed to review papers at all**. The censorship of this article, [two comprehensive survey papers](#) by Lerner, and many other articles by other researchers in the past three years was protested in a [petition by two dozen astrophysicists and astronomers](#).

This censorship and the whole scientific and social situation with cosmology as well as its connection to fusion energy will be discussed by Lerner at [a talk](#) to be given

following [the debate](#). If you can't make it to London, catch it online! We'll let everyone know online links as they become available.

Wefunder Capital Campaign Closes in on \$200,000

13 Aug \$200




Raul Figueroa Tamayo
Elementary teacher with a passion for investing in companies and trying to diversify in innovative and growth companies.

EMAIL

I believe that solar, wind and hydro are energies that realistically cannot provide the supply needed to take human civilization to the next step. Thereby, Fusion and Nuclear are the only real options and your description and ability to provide that energy in your presentation is what convinced me to invest. "Now Forward unto the next step of our partnership."

SPV REG CF REGULAR

15 Aug \$400



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I care deeply about the future of our planet, and I want to put my money towards things that are meaningful to me and will lead to real change. I am also trusting that you will stick to your ethical values in ensuring that developing nations are able to access the technology for their own benefit as well.

SPV REG CF REGULAR

LPPFusion's 2022 Wefunder campaign has now passed \$150,000, 75% of our minimum goal. We are closing in on \$200,000, a level that will cause Wefunder to release this money for fusion research. It's important that we reach this goal in the next week, so if you have planned to invest in LPPFusion this year, now is the time to do it. We realize lots of you are on vacation, but fusion research needs funding year-round!

Here's what some recent investors gave on our website as their reasons for investing:

Your containment technique makes a lot more sense and seems a lot more viable than magnetic containment! I also must say that your evidence-based views on the Big Bang are quite refreshing to see.

I believe that solar, wind and hydro are energies that realistically cannot provide the supply needed to take human civilization to the next step. Therefore, Fusion and Nuclear are the only real options and your description and ability to provide that energy in your presentation is what convinced me to invest. "Now Forward unto the next step of our partnership."

The world desperately needs sustainable and ethical energy sources

Finally...A real prospect to fusion!! I'm in!