U.S. EDITION SIGN IN SUBSCRIBE



Search

U.S.
World
Business
Tech & Science
Culture
Sports
Health

Green Rankings

Opinion

THE UNIVERSE SHOULD NOT ACTUALLY EXIST, CERN SCIENTISTS DISCOVER

BY HANNAH OSBORNE ON 10/25/17 AT 9:11 AM



The universe as we know it should not exist, scientists working at CERN, the European Organization for Nuclear Research, have said.

After performing the most precise experiments on antiprotons that have ever been carried out, researchers have discovered a symmetry in nature that they say just shouldn't be possible.

One of the big questions about the universe is how the first matter formed after the Big Bang. Because particles and antiparticles annihilate one another when they come into contact, if there were exactly equal measures of both, the universe wouldn't exist—at least not in the form we see it today. As such, there must be an imbalance between particles and antiparticles, even if it is only by the tiniest fraction.

Keep Up With This Story And More By Subscribing Now

But this is not the case. All experiments designed to find this asymmetry have come up blank. This is also true of the latest, which were recently carried out at CERN by an international team of researchers. The findings from the BASE (Baryon Antibaryon Symmetry Experiment) are published in the journal *Nature*.



The Milky Way and Andromeda galaxies.

NASA

"All of our observations find a complete symmetry between matter and antimatter, which is why the universe should not actually exist," first author Christian Smorra, from Japan's RIKEN institute, said in a statement.

In the study, researchers used antiprotons that had been isolated in 2015. The antiprotons were measured using the interaction of two traps that use electrical and magnetic fields to capture them. The team was able to measure the magnetic force of the antiproton to a level that is 350 times more precise than ever before.

If there was an imbalance between protons and antiprotons, this level of precision would be the best bet for finding it. "At its core, the question is whether the antiproton has the same magnetism as a proton," said Stefan Ulmer, spokesperson of the BASE group. "This is the riddle we need to solve."

"The measurement of antiprotons was extremely difficult and we had been working on it for 10 years. The final breakthrough came with the revolutionary idea of performing the measurement with two particles."

After finding no asymmetry between particles and antiparticles, the researchers will now work to develop even higher-precision measurements of protons and antiprotons to improve on the

latest findings. "An asymmetry must exist here somewhere but we simply do not understand where the difference is. What is the source of the symmetry break?" Smorra said.

REQUEST REPRINT OR SUBMIT CORRECTION

Promoted Links

Ads by Revcontent

You Should Never Shop on Amazon Again After Seeing

Tophatter

The Unusual Link
Between Coconut Oil
and Alzheimer's

Memory Repair Protocol

Cardiologist Warns: Throw out Your Probiotics Now

PrebioThrive

You Already Pay for Amazon Prime - Here's How You Can

Honey

ADVERTISEMENT

Join the Discussion

34 Comments Sort by Newest

This thread is closed



Jasmine Mazzitello · Billing/Accounts Receivable at Logistics Planning Services

"One of the big questions about the universe is how the first matter formed after the Big Bang." The only 'Big Bang' was a DIVINE one. When, if ever, will people understand that we have a CREATOR? Some of us understand...it's called FAITH. Scientists spend futile efforts trying to unlock the mystery of our existence. Never happen. I'm no scientist and I'm not even that dumb.

Like · 6 · 8w

Load 10 more comments

Facebook Comments Plugin

ADVERTISEMENT

MOST READ



China: 'This is Not How a U.S. President Should Behave'



Melania Trump Orders Removal of Near-200-Year-Old Tree



Oops! Ivanka Vacation Pic Has Rebel Flag in Background



Meghan Markle Photo Appears in Queen's Speech



Trump Fires HIV/AIDS Council in Its Entirety

ADVERTISEMENT

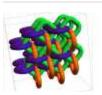
SIGN UP FOR OUR NEWSLETTER

SIGN UP

Update your preferences »

ADVERTISEMENT

RELATED STORIES



Universe Is 3-D Because It Knotted After the Big Bang



Mystery of the Universe's Missing Matter Finally Solved



Why We Haven't Found Life Anywhere Else in the Universe

ADVERTISEMENT

CHOOSE A MEMBERSHIP THAT'S PERFECT FOR YOU!

7 of 9

DIGITAL ONLY

- ✓ Free access to 40+ digital editions
- ✓ Website access
- ✓ Daily Newsletter

SUBSCRIBE

Newsweek

© 2017 NEWSWEEK LLC



About Us Corrections Contact Us Newsweek Media Group Travel Advertise Copyright

Privacy Policy Terms of Service Terms of Sale Archive

9 of 9