https://www.youtube.com/watch?v=zKbETCWjTz8

The True Crisis in Cosmology Is Invisible: The Quipu Illusion

Skutečná krize v kosmologii je neviditelná: Iluze Quipu

See the Pattern

47,7 tis. Odběratelů

15. 2. 2025 Nedávný objev otřásl základy kosmologie – Quipu, obrovská kosmická struktura přezdívaná největší, jaká kdy byla ve vesmíru pozorována. Quipu, táhnoucí se přes nepředstavitelné vzdálenosti, zpochybňuje vše, co jsme si mysleli, že víme o vesmíru. Jak se mohlo něco tak masivního a složitého zformovat v časové ose stanovené modelem velkého třesku? V této epizodě se ponoříme hluboko do objevu Quipu a prozkoumáme, co odhaluje o rozsáhlé struktuře vesmíru a modelech, které používáme k jeho pochopení. Mohla by být tato kolosální struktura důkazem, že naše současné teorie jsou neúplné – **nebo dokonce zásadně chybné?** Prozkoumáme, jak Quipu zapadá (nebo nezapadá) do standardního modelu kosmologie a co to znamená pro budoucnost našeho chápání vesmíru. Je čas přehodnotit způsob, jakým interpretujeme kosmická data? Připojte se k nám při zkoumání důsledků tohoto převratného objevu, zpochybňujte předpoklady zabudované do našich modelů a položte si odvážnou otázku: Pokud nás naše modely vedou k tomu, abychom viděli vzorce a souvislosti, které nemusí být skutečné, jak velká část našeho chápání vesmíru je skutečně objektivní? →

← **2/15/2025** A recent discovery has shaken the foundations of cosmology – Quipu, a giant cosmic structure dubbed the largest ever observed in the universe. Stretching across unimaginable distances, Quipu challenges everything we thought we knew about the universe. How could something so massive and complex have formed on the timeline dictated by the Big Bang model? In this episode, we dive deep into the discovery of Quipu and explore what it reveals about the large-scale structure of the universe and the models we use to understand it. Could this colossal structure be evidence that our current theories are incomplete – **or even fundamentally flawed?** We explore how Quipu fits (or doesn't fit) into the standard model of cosmology and what this means for the future of our understanding of the universe. Is it time to rethink the way we interpret cosmic data? Join us as we explore the implications of this groundbreaking discovery, question the assumptions built into our models, and ask a bold question: If our models lead us to see patterns and connections that may not be real, how much of our understanding of the universe is truly objective?

0:00
(01)- Scientists just discovered the biggest structure in the universe—so big, it might challenge everything we think we know about cosmic structure A new study published by a group of Astronomers has just identified the largest known structure in the universe, which they named Quipu. It was part of an effort to understand how massive structures influence the cosmic web, galaxy formation, and even measurements of the hubble constant.

What is It?

So what exactly is Quipu? It is a vast collection of galaxy clusters interconnected by huge filaments. The authors describe it as a long cosmic filament with smaller branching filaments. This is how they coined its name Quipu which refers to the knotted cords used by the Inco civilisation to record information. But the structure is huge, estimated at over 428 Megaparsecs or 1.4 billion light-years long! It has an estimated mass of $\sim 2 \times 10^{17}$ solar masses. It is thought to contain 68 galaxy clusters,

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holding billions of galaxies and a huge fraction of cosmic matter in this region.

How Does It Compare?

But how does this compare to other known large structure in the universe? On the smaller end of the scale we have the Shapely supercluster at a mere 90Mpc or 300 million lights years its significantly smaller but is considered a very dense stucture. Next up is the Sloan Great Wall still smaller at a round 328 Mpc or 1.07 billion light years in length. There is one structure that dwarfs all others—the Hercules-Corona Borealis Great Wall—stretching an astonishing 3000 Mpc (10 billion light-years) across. However, its existence is highly debated. The issue lies in how it was detected: using gamma-ray bursts as tracers of large-scale structure. Unlike galaxies or clusters, gamma-ray bursts are rare, short-lived, and difficult to pinpoint precisely in redshift space, making it hard to confirm whether they truly outline a

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coherent structure. This uncertainty has kept the Hercules-Corona Borealis Great Wall in a grey area of cosmic structure studies—an intriguing possibility, but not a confirmed reality. Unlike the debated Hercules-Corona Borealis Great Wall, the discovery of Quipu rests on much firmer observational ground—thanks to X-ray data. Researchers identified it using a friends-of-friends algorithm, which connects nearby galaxy clusters based on their separations to map large-scale structures. The key advantage? Instead of relying on indirect tracers like gamma-ray bursts, Quipu was found using the CLASSIX survey, which tracks galaxy clusters by their X-ray emissions. This approach is far more reliable for mapping mass distribution because X-ray emissions directly trace hot gas within massive clusters, allowing astronomers to precisely determine their positions and redshifts. The team confirmed that Quipu stretches across a redshift range of ~0.027 to 0.065,

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revealing a structure of immense scale. Even more intriguingly, Quipu may extend beyond the Zone of Avoidance—a region where our own Milky Way's dust obscures observations—meaning this massive structure could be even larger than currently measured. So why does this matter? Well, structures this large could shake up our understanding of how

Does it Break the Big Bang Model?

the universe is supposed to be organized. Let’s take a closer look at why Quipu is important.

SO WHY DOES IT MATTER

Structures this large aren’t supposed to exist—at least, not if the universe is homogeneous on the largest scales. So does Quipu break the Big Bang model? The Cosmological Principle & Large-Scale Structure The Cosmological Principle states that the universe should be homogeneous and isotropic on large scales—meaning, if you zoom out far enough, matter should be evenly distributed. According to ΛCDM (Lambda Cold Dark Matter) cosmology, structures like galaxy clusters and filaments form from small density fluctuations in the early universe, which grow over time due to gravity. However, there's supposed to be a natural limit—around 300 Mpc—beyond which structures should blend into a smooth distribution. Quipu is 428 Mpc long—well beyond this supposed limit, raising the question: are these ultra-large structures breaking our models? Interestingly, simulations based on the standard ΛCDM model do show the formation of some superstructures like Quipu. The researchers found similar structures in the Millennium Simulation, a computer model of the universe's evolution—but does that really mean they naturally form in a ΛCDM universe? The key lies in how these structures are identified. In the simulations, the researchers used a friends-of-friends algorithm with a linking length of 38.5 Mpc to group nearby galaxy

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(01)- Scientists have just discovered the largest structure in the universe—so large that it could challenge everything we think we know about the structure of the universe. A new study published by a group of astronomers has just identified the largest known structure in the universe, which they have named **Quipu**. It was part of an effort to understand how massive structures affect the cosmic web, galaxy formation, and **even measurements of the Hubble constant.** What is it? So what exactly is Quipu? It's a vast collection of galaxy clusters connected by giant filaments. The authors describe it as a long cosmic filament with smaller branching filaments. That's how they coined the name Quipu, which refers to the knotted cords used by the Inca civilization to record information. But the structure is huge, estimated to be over 428 megaparsecs, or 1.4 billion light-years long! It has an estimated mass of ~2×10^{17} the mass of the Sun. It is thought to contain 68 galaxy clusters, 1:00 holding billions of galaxies and a huge fraction of the cosmic mass in that region. How does that compare? But how does it compare to other known large structures in the universe? At the smaller end of the scale, we have the Shapely Supercluster at just 90 Mpc or 300 million light-years across, it is significantly smaller but is considered a very dense structure. Next up is the even smaller Sloan Great Wall at a whopping 328 Mpc or 1.07 billion light-years across. There is one structure that dwarfs all the others – the Hercules-Corona Borealis Great Wall – stretching across an astonishing 3000 Mpc (10 billion light-years). Its existence, however, is hotly debated. The problem lies in how it was detected: using gamma-ray bursts as indicators of large-scale structure. Unlike galaxies or clusters, gamma-ray bursts are rare, short-lived, and difficult to pinpoint in redshift space, making it difficult to confirm whether they actually outline
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coherent structure. This uncertainty has kept the Great Wall of Hercules-Corona Borealis in the gray area of cosmic structure studies—an intriguing possibility, but not a confirmed reality. Unlike the much-discussed Great Wall of Hercules-Corona Borealis, the discovery of Quipu rests on a much firmer observational basis—thanks to X-ray data. The scientists identified it using a friend-of-friends algorithm, which connects nearby galaxy clusters based on their separations and maps out large-scale structures. The key advantage? Instead of relying on indirect indicators like gamma-ray bursts, Quipu was found using the CLASSIX survey, which tracks galaxy clusters by their X-ray emissions. This approach is much more reliable for mapping the distribution of mass, because X-ray emission directly tracks the hot gas in massive clusters, allowing astronomers to pinpoint their location and redshift. The team confirmed that Quipu spans a redshift range of ~0.027 to 0.065,

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revealing a structure of immense size. Even more intriguing, Quipu may extend beyond the zone of avoidance—the region where dust in our own Milky Way obscures observations—meaning this massive structure could be even larger than currently measured. So why does it matter? Such large structures could >shake up our understanding of how the universe is supposed to be organized. Let's take a closer look at why Quipu is important. SO WHY DOES IT MATTERS. Such large structures shouldn't exist—at least not if the universe is homogeneous on the largest scales. So does Quipu violate the Big Bang model? Cosmological principle and large-scale structure The cosmological principle says that the universe should be homogeneous and isotropic on large scales – that is, if you zoom out far enough, matter should be evenly distributed. According to ΛCDM (Lambda Cold Dark Matter) cosmology, structures like galaxy clusters and filaments form from small density fluctuations in the early universe that grow over time under the influence of gravity. However, it is believed that there is a **natural limit** – around 300 Mpc – beyond which the structures should blend into a smooth distribution. Quipu is 428 Mpc long – well beyond this assumed limit, which raises the question: do these ultra-large structures break our models? Interestingly, simulations based on the standard ΛCDM model actually show the formation of some superstructures like Quipu. Researchers have found similar structures in the Millennium Simulation, a computer model of the evolution of the universe – but does that really mean they form naturally in the ΛCDM universe? The key lies in how these structures are identified. In the simulations, the researchers used a friends-of-friends algorithm with a connection length of 38.5 Mpc to cluster nearby galaxies.

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(02)- clusters into superstructures. This linking length is a

Data Manipulation?

threshold distance that decides which clusters are considered connected—but it's a parameter we choose, not an inherent property of the universe. By adjusting the linking length, you can make clusters appear more connected, merging them into larger structures or breaking them apart. In other words, the size of Quipu depends partly on how we define and measure it.

5:04

This reveals something fundamental about cosmology: it's all about the model used to interpret the data. By choosing a particular linking length, we're not just analyzing the universe—we're imposing a framework that decides where connections begin and end. In doing so, we might be creating links that don't actually exist in reality. Instead of proving ΛCDM can explain Quipu, these simulations show how assumptions in our models can shape our understanding of cosmic structure, blurring the line between discovery and interpretation The Missing Integrated Sachs-Wolfe (ISW) Effect

No CMB Imprint!?

The ISW effect occurs when cosmic structures distort the Cosmic Microwave Background (CMB)—superstructures should leave a hot spot due to the way photons gain energy passing through evolving gravitational wells. The Quipu researchers searched for this effect in Planck satellite data and found… nothing significant. If Quipu is really this massive, why doesn't it leave a stronger imprint on the CMB?

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The absence of a strong ISW signal suggests a deeper problem with how ΛCDM connects cosmic structure, dark matter, and the CMB: - Dark Matter's Role in Structure

Formation - ΛCDM assumes dark matter drives structure formation, creating the early density fluctuations that later grew into filaments, walls, and voids. - If Quipu exists on this scale, then the gravitational effects of its mass should be obvious, but the missing ISW signal suggests that something is off in this picture. - Is the CMB Really What We Think It Is? - If the CMB truly represents the leftover radiation from the Big Bang, then large-scale structures should interact with it in predictable ways. - The lack of an ISW imprint could suggest the CMB isn't actually a direct relic of the early universe, but something else entirely. - This directly connects to alternative interpretations of the CMB, which I've covered in my previous video—so if you haven't seen that, I highly recommend checking it out.

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Quipu's missing imprint isn't just a small anomaly—it highlights a fundamental disconnect between key elements of the Big Bang model This strengthens the case that we might need a radically different framework for how we interpret: 1. The origins of cosmic structure 2. The true nature of the CMB 3. The role of dark matter in the universe If Quipu's sheer size already pushes the limits of cosmic structure formation,

Alternative Explanations

and its missing CMB imprint adds to the mystery, then maybe it's time to consider other explanations. Could we be looking at evidence for an alternative cosmic model?

Plasma Cosmology The Plasma Cosmology Perspective - Plasma cosmology suggests that electromagnetic forces, rather than just gravity, play a dominant role in shaping large-scale structures. - If filaments in the cosmic web are actually Birkeland currents—massive plasma structures conducting electricity across intergalactic space—then structures like Quipu could be a natural outcome.

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(02)- clusters into superstructures. This connection length is a Data Manipulation? threshold distance that decides which clusters are considered connected—but it's a parameter we choose, not an inherent property of the universe. By adjusting the connection length, you can make clusters appear more connected, merge them into larger structures, or split them apart. In other words, the size of the Quip depends in part on how we define and measure it.

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This reveals something fundamental about cosmology: **it's all about the model used to interpret the data.** Yes. I say this in every comment on the achievements of cosmology. By choosing a particular connection length, we're not just analyzing the universe—we're imposing a framework that decides where connections begin and end. In doing so, we can create links that don't actually exist. Rather than proving that ΛCDM can explain Quipu, these >simulations show how assumptions in our models can shape our understanding of cosmic structure, blurring the line between discovery and interpretation< The Missing Integrated Sachs-Wolfe (ISW) Effect. No CMB fingerprint!? The ISW effect occurs when cosmic structures distort the cosmic microwave background (CMB)—the superstructures should leave a hot spot because of the way photons gain energy passing through evolving gravitational wells. The Quipu researchers looked for this effect in Planck satellite data and found... nothing significant. If Quipu is really that massive, why doesn't it leave a stronger fingerprint on the CMB?

6:04

The absence of a strong ISW signal suggests a deeper problem with how ΛCDM links cosmic structure, dark matter, and the CMB: - The role of dark matter in structure formation - ΛCDM assumes that dark matter drives structure formation, what if dark matter doesn't exist creating early density fluctuations that later grew into filaments, walls, and voids. - If Quipu exists on this scale, then the gravitational effects of its mass should be obvious, but the missing ISW signal suggests that something is wrong with this picture. - Is the CMB really what we think it is? Interesting doubts! - If the CMB really represents the remnants of radiation from the Big Bang, then large-scale structures should interact with it in predictable ways. - The absence of an ISW fingerprint could indicate that the CMB is not actually a direct remnant of the early universe, but something else entirely. Maybe it would be enough to fix the fitting of the measured values, that is, fix the "formulas" where the measured values were fitted - This is directly related to the alternative interpretations of the CMB that I described in my previous video - so if you haven't seen it, I highly recommend watching it.
7:02
The missing Quipu fingerprint is not just a small anomaly - it highlights a fundamental contradiction between key elements of the big bang model. I still think that the error is that spacetime in the early universe is significantly curved (from a global perspective) and therefore Hubble's equation **$v = H_0 . d$** no longer applies. And if the "detection" of dark matter is not yet valid (also a mis-implied https://www.hypothesis-of-universe.com/docs/eng/eng_130.pdf ; https://www.hypothesis-of-universe.com/docs/c/c_489.jpg), then it is enough to distort the resulting view of the early universe. This strengthens the argument that we might need a radically different framework. I just talked about it… for how we interpret: **1.** The origin of cosmic structure **2.** The true nature of the CMB **3**. The role of dark matter in the universe. **Exactly. These are the "things" that will be mis-determined as a result of not respecting the curvature of the spacetime dimensions of the universe. If the sheer size of the Quipu pushes the boundaries of how the universe formed, the Alternative Explanation and its missing CMB fingerprint adds to the mystery, then maybe it is time to consider other explanations. How can you consider them when someone keeps deleting my posts, opinions on YouTube. My post from yesterday didn't even last a few hours there. **Could we look for evidence for an alternative cosmic model?** Plasma cosmology. The plasma cosmology view - plasma cosmology suggests that electromagnetic forces, rather than just gravity, play a dominant role in the formation of large-scale structures. - If the threads in the cosmic web are actually Birkeland currents - massive plasma structures conducting electricity through intergalactic space - then structures like the Quipu could be a natural result. Yeah, yeah, how fiercely and furiously cosmologists resist re-evaluating their theories and "untouchable dogmas"...

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(03)- - This would mean: - Large-scale structures form more rapidly and can
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extend over greater distances than ΛCDM predicts. - The CMB could be local microwave radiation, rather than a relic of the Big Bang. - Quipu's missing ISW effect makes sense—because the CMB may not be interacting with large-scale structures at all. The Challenge: Plasma cosmology still lacks detailed simulations on the same scale as ΛCDM models.

MOND

Modified Gravity & Large-Scale Flows - Some alternative models propose that gravity itself may behave differently on cosmic scales. - MOND (Modified Newtonian Dynamics) and emergent gravity models suggest that what we call dark matter might actually be a misinterpretation of how gravity works over vast distances. - If Quipu's mass isn't behaving as expected—not pulling on the CMB as much as it should—could this be evidence that gravity doesn't work the same way at these scales? - The Challenge: These models still struggle to fully explain cosmic microwave background patterns.

Inhomogeneous Universe Models

Inhomogeneous Universe Models

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- What if the universe isn't actually homogeneous at large scales, as the Cosmological Principle assumes? - The Lemaître–Tolman–Bondi (LTB) model suggests that our local universe could have density variations that affect how we interpret cosmic expansion. - This could mean: - Cosmic structures like Quipu are not anomalies—they are evidence that the universe is clumpier than expected. - If large-scale inhomogeneities exist, our measurements of the Hubble constant and dark energy may be skewed. - The ISW effect might be weaker in certain regions simply because CMB photons are passing through underdense regions. - The Challenge: This model would require a major rethink of cosmic expansion and standard candles like SN1a supernovae. Unknown Factors: Something We Haven't Considered?

Unknown Factors

- The missing ISW effect suggests a gap in our understanding of the interaction between large-scale structures and cosmic background radiation. - Could Quipu be part of a new class of

10:02

structures that form outside our current models? - Is there an unknown interaction between matter and radiation that we don't yet fully grasp? - Future surveys and deeper observations may provide new clues—or even force us to rethink our cosmic models.

Illusionary Structure

Nothing to See here - Quipu is interpreted as a filamentary structure in the cosmic web because all its clusters fall within a narrow redshift range, suggesting they are at similar cosmic distances. But they don't seem to be gravitationally bound, meaning they're not moving toward a common center—they're just correlated in redshift space - But what if that assumption is wrong? Astronomer Halton Arp proposed that redshift might be an intrinsic property of galaxies—occurring in quantized steps. This would lead to walls of galaxies at similar redshifts, but not because they are at the same distance—instead, they'd be spread out in space, but we'd misinterpret them as connected structures due to their quantized redshifts. - If that were true, then Quipu might not be a connected structure at all—we'd

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just be misinterpreting it as one because we're seeing galaxies at similar redshift steps. This would challenge our entire model of cosmic structure formation. The discovery of Quipu raises big questions—not just about how large-scale structures form, but

Final Thoughts

about the very foundations of cosmology itself. --- - Quipu is the largest confirmed cosmic structure at 428 Mpc (1.4 billion light-years)—bigger than the Sloan Great Wall and beyond the expected size limit of cosmic structures. - It challenges the Cosmological Principle, which assumes the universe is smooth on large scales.- Its missing CMB imprint (the weak ISW effect) suggests a disconnect in how ΛCDM links dark matter, structure formation, and the CMB. - Simulations show similar structures, but they rely on a chosen linking length that

groups clusters into larger structures, raising the question: Are we seeing real cosmic connections, or is the model creating them? - This points to a deeper issue in cosmology: the
12:01
assumptions in our models shape how we interpret data. If we adjust parameters to find structures, are we discovering reality or imposing it? - This echoes Halton Arp's warning
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(03)- This would mean: - Large structures form faster and can
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spread over greater distances than ΛCDM predicts. - The CMB could be local microwave radiation, rather than a remnant of the Big Bang. All of this affects cosmologists' obliviousness to dimensional curvatures in the early universe - Quipu's missing ISW effect makes sense – because the CMB may not interact with large-scale structures at all. Challenge: Plasma cosmology still lacks detailed simulations on the same scale as ΛCDM, MOND Modified Gravity and Large-Scale Flows - Some alternative models suggest that gravity itself may behave differently on cosmic scales. Sure!! Newton's formula for force **$F = G.M.m/x^2$** is being used incorrectly because the distance "**x**" between objects (and that could be galaxies from each other) is not straight, but curved (!) https://www.hypothesis-of-universe.com/docs/c/c_489.jpg - MOND (Modified Newtonian Dynamics) and emergent gravity models suggest that **what we call dark matter may actually be a misinterpretation of how gravity works at vast distances**. – Cosmologists keep talking, writing, scheming about it, but they don't do anything to fix it… why? If the Quipu mass doesn't behave as expected – it doesn't pull on the CMB as it should – could this be evidence that gravity doesn't work the same way on these scales? Why do physicists ignore my suggestion about "**x**" in an arc??? - Challenge: These models are still struggling to fully explain the patterns of cosmic microwave background. Inhomogeneous models of the universe Inhomogeneous models of the universe
9:01
- What if the universe is not actually homogeneous on large scales, !!! as the Cosmological Principle assumes? - The Lemaître–Tolman–Bondi (LTB) model suggests that our local universe **could** have density variations, apparently so, since "dimensional warping is mass-generating", dark energy will be "gently curved spacetime on Planck scales"… which affect how we interpret cosmic expansion. (!) - This could mean: - Cosmic structures like Quipu are not anomalies - they are evidence that the universe is more dense than expected. Than expected according to the "old formulas"… - If there are large inhomogeneities, our **Hubble constant** and dark energy measurements could be biased. Yes. I've been talking about these possibilities for 10^{-15} years... but no one reads the website. Why? Well, because some country bumpkin writes them... - The ISW effect may be weaker in some areas simply because CMB photons pass through low density regions. Photons passing through locations with different dimensional curvature - Challenge: This model would require a fundamental reassessment of cosmic expansion and standard candles like SN1a supernovae. a reassessment of distances, as they may not agree due to dimensional curvature. Unknown factors: Something we didn't consider? Dimension curvatures!! Unknown factors - The missing ISW effect suggests a gap in our understanding of the interaction between large-scale structures and the cosmic microwave background radiation. - Could Quipu be part of a new class of
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structures that form outside of our current models? It could, but such flashlight physicists as Brian Greene, Sean Caroll are holding it back with their bullshit… - Is there an unknown interaction between matter and radiation that we do not yet fully understand? - Future explorations and deeper observations may provide new clues – or even force us to rethink our cosmic models. Illusory structure. Nothing to see here – Quipu is interpreted as a filamentary structure in a cosmic web, and is that cosmic web "gravitational spacetime", or an underlying flat spacetime in which matter "floats" crooked with matter?? because all its clusters fall within a narrow range of redshift, redshift, again a factor in physical science that can be misinterpreted due to the curvature of dimensions … (!) which suggests that they are at similar cosmic distances. Distances are different in flat spacetime and curved spacetime… However, they do not appear to be gravitationally bound, meaning they do not move towards a common center – they only correlate in redshift space – But what if this assumption is wrong? These discrepancies keep increasing… Astronomer **Halton Arp** has suggested that redshift could be an intrinsic property of galaxies – occurring in quantized steps. And what if the curvature (and local curvature) of dimensions plays a role in that distorted redshift… (?) This would lead to galaxy walls with similar redshifts, but not because they are at the same distance well, it could be: the same distance (locality = galaxies), but different localities with different dimensional curvature… – instead they would be spread out in space, but we would misinterpret them as connected structures because of their quantized redshifts.
(!) even so - If this were true, then Quipu might not be a connected structure at all – we would be
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just misinterpreting it as one, because we see galaxies at similar redshift steps. This would challenge our entire model of cosmic structure formation. The discovery of Quipu raises big questions – not only about how large-scale structures form, but also Final Thoughts about the very foundations of cosmology itself. -- -- Quipu is the largest confirmed cosmic structure at 428 Mpc (1.4 billion light-years) – larger than the Sloan Great Wall and beyond the expected limit on the size of cosmic structures. - It challenges the cosmological principle that assumes the universe is smooth on large scales. What do you mean "smooth"?..that it is not very curved???? - Its missing CMB fingerprint (weak ISW effect) suggests a contradiction in how ΛCDM relates dark matter, structure formation, and the CMB. - The simulations show similar structures, but rely on a chosen link length that groups the clusters into larger structures, raising the question: Are we seeing real cosmic connections, or is the model creating them? - This points to a deeper problem in cosmology:
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the assumptions in our models affect how we interpret the data. If we adjust the parameters to find structures, are we discovering reality or imposing it? And you are silencing it by erasing similar views… - This echoes **Halton Arp**'s warning.
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(04)- that redshift interpretation could be creating illusory structures—not because they're actually connected, but because of how we choose to interpret their redshifts. - Quipu doesn't just challenge ΛCDM—it challenges our confidence in the frameworks we use to understand the universe. --- Open Questions & Future Implications - Is Quipu a real, physical structure, or a product of our models? If the linking length used to find it defines its existence, then it raises the possibility that we're seeing patterns that aren't actually there. - If more structures like Quipu are found, will it break the 300 Mpc size limit or force us to reconsider how we define connected structures? - Could this discovery be part of a larger pattern of inconsistencies in ΛCDM,

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similar to the Hubble tension and CMB anomalies? - Does the missing ISW effect suggest that dark matter isn't behaving as expected, or does it challenge the nature of the CMB itself? - And most importantly: Are we building a model of the universe, or is the model building our understanding of the universe? --- Quipu isn't just another cosmic structure—it's a mirror held up to cosmology itself. If our models are leading us to see patterns and connections that might not be real, then how much of our understanding of the universe is truly objective? This resonates with Arp's critique of redshift quantization: Are we misinterpreting redshift patterns as physical structures because of our underlying assumptions? Quipu may be just one structure, but its implications ripple through multiple areas of cosmology. Are we missing something fundamental? Do we need new models, or is this just another piece of the puzzle we haven't fully understood yet? I'd love to hear your thoughts—does this discovery challenge the Big Bang model, or is there another explanation? Let me know in the comments. And if you want to explore the deeper

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problems with the CMB and cosmic expansion, check out my previous video where I break it all down.

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(04)- this redshift interpretation could create illusory structures – not because they are actually connected, but because of how we choose|| to interpret their redshifts. - Quipu doesn't just challenge ΛCDM – it challenges our confidence in the frameworks we use to understand the universe. --- Open questions and future implications - **Is Quipu a real physical structure or a product of our models?** If the connection length used to find it defines its existence, then that raises the possibility that we are seeing patterns that aren't actually there. (!) - If more structures like Quipu are found, will it break the 300 Mpc size limit or force us to rethink how we define connected structures? - Could this discovery be part of a larger pattern of inconsistencies in ΛCDM,

13:01

similar to the Hubble strain and the CMB anomaly? - Does the missing ISW effect suggest that dark matter is not behaving as expected, doesn't exist, or does it call into question the nature of the CMB itself? - And most importantly: Are we building a model of the universe, or is the model building our understanding of the universe? --- Quipu is not just another cosmic structure – it is a mirror built on cosmology itself. If our models lead us to see patterns and connections that may not be real, to what extent is our understanding of the universe really objective? This resonates with Arp's critique of quantization of redshift: Do we interpret redshift patterns as physical structures because of our basic assumptions? Quipu may be just one structure, but its implications spread across many areas of cosmology. Are we missing something fundamental? ?!! Do we need new models, or is it just another piece of the puzzle that we don't fully understand yet? Take a look at HDV. I'd love to hear your thoughts but they won't reach you, they're deleted the same day – does this discovery challenge the big bang model, or is there another explanation? **Let me know in the comments**. And if you want to delve deeper into

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the problems with the CMB and cosmic expansion, check out my previous video where I break it all down.
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JN, 02/16/2025