

Ode to E Pluribus Unum for Sunday November 3 2024

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Practice Makes Perfect



Photograph By Jack Zhi, Wildlife Photographer of the Year

In "Practice Makes Perfect," a young [peregrine falcon](#) chases after a butterfly above its cliffside nest in Yukon, Canada. American photographer Jack Zhi, winner of the Behavior: Birds category, has visited this area for eight years to observe the life cycles of these birds, which can fly at speeds up to 200 miles per hour—making them the fastest animals on Earth

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Chords & Riffs

Benny Goodman (1909-1986)

Benny Goodman was a clarinetist and bandleader responsible for multiple hit singles as a band leader before World War II.



biography.com

Benny Goodman was a clarinetist and bandleader responsible for multiple hit singles as a band leader before World War II. Goodman left school at 14 to join the American Federation of Musicians. He reached the height of his popularity in the 1930s, when

swing was most popular, creating many hits and being the first jazz band to play Carnegie Hall.

The son of Russian immigrants, he was the ninth child born into the family and eventually he would have a total of 11 siblings. At the age of 10, Goodman went to study music at Kehelah Jacob Synagogue. He studied the clarinet with Franz Schoepp who was a member of the Chicago Symphony. At Hull-House, a settlement house that provided social services to the community, Goodman joined the band there. He quickly excelled at his instrument and made his professional debut in 1921. Two years later, Goodman moved to Los Angeles to join Ben Pollack's band. He stayed with the band for several years, eventually becoming one of its leading soloists. In 1928, Goodman released his first album, A Jazz Holiday. He then left the band and moved to New York City the following year.

Starting his career as a bandleader in 1934, Goodman and his group landed a gig at Billy Rose's Music Hall. The Benny Goodman Orchestra then became a regular act on the NBC radio show, Let's Dance, that same year. Clearly a musician and bandleader on the rise, Goodman had his first number one hit with the instrumental piece "Moonglow."

In 1935, Goodman went on the road with his orchestra, which at the time included trumpeters Ziggy Elman and Harry James, pianists Jess Stacey and Teddy Wilson, and drummer Gene Krupa among others. (Lionel Hampton was added later.) One date on the tour made history: August 21, 1935. That night, the orchestra wowed the audience at the Palomar Ballroom in Los Angeles—an event that many cite as the beginning of the swing era. Goodman also helped break down the color barrier in music at the time by having one of the first integrated bands.

Still remembered as one of jazz's greatest artists, Goodman was featured on a postage stamp in 1996 as part of the Legends of American Music series.

Sing, Sing, Sing and other hits <https://youtu.be/5vuDQaMpCb4?list=RD5vuDQaMpCb4>

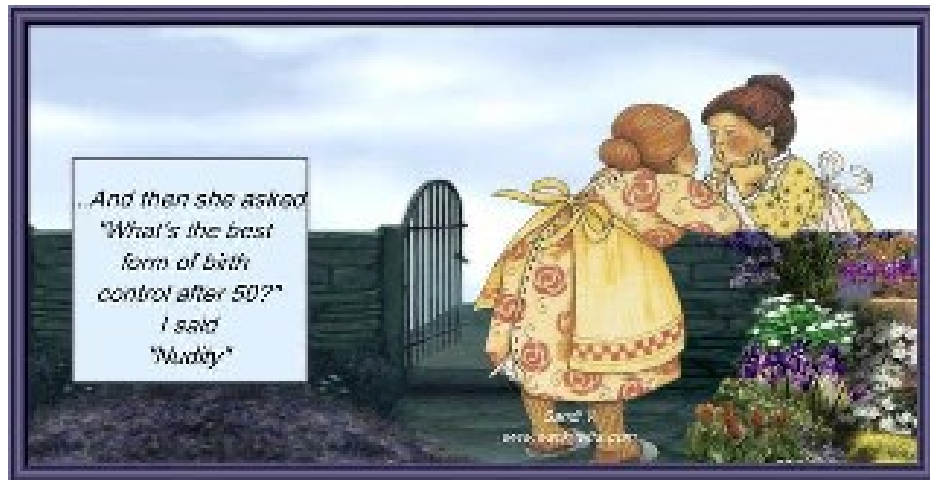
Stealing Apples Lionel Hampton and Benny Goodman <https://youtu.be/ut3gVnO9YnY>

Why Don't You Do Right - Peggy Lee - https://youtu.be/4zRwze8_SGk

Moonglow Benny Goodman Quartet https://youtu.be/4zRwze8_SGk

Don't Be That Way <https://youtu.be/lcCZZ3l9tBo>

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Homefront Dad Shows Mom How He's Caring for the Little Darling



A graphic artist living in Germany works from home while his wife leaves their baby girl with him each day as she goes off to work.

A few months ago, he got tired of her texting to check on how he was doing with the baby, so he started photoshopping responses to text back to her. I'll try and include a different one in subsequent Odes.

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Quantum Oscillators Fall in Synch Even When Classical Ones Don'



Coupled oscillators: Fireflies naturally flash their lights in synch.
(Courtesy: Shutterstock/Fer Gregory)

The synchronized flashing of fireflies in summertime evokes feelings of marvel and magic towards nature. How do they do it without a choreographer running the show?

For some physicists, though, these natural fireworks also raise other questions. If the fireflies were quantum, they wonder, would they synchronize their flashing routines faster or slower than their classical counterparts?

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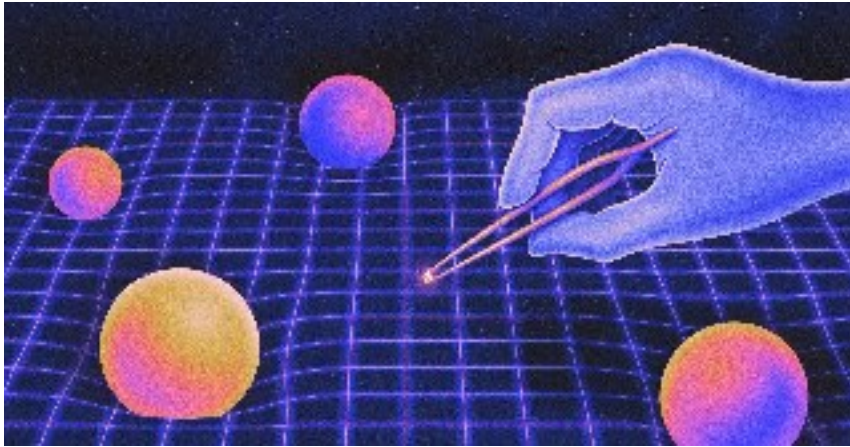
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Checking your balance on a Sunday morning



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Why We Need Mathematicians to Understand Space-Time



Quanta

As scientists venture to understand our world, mathematics often serves as both their language and their guide. Physicists rely on math not just to describe what they see in their laboratories but also to predict and explore phenomena that their tools cannot otherwise touch, like the insides of black holes or the moments just after the universe began. Some of the biggest breakthroughs in physics were only made possible by mathematical advances. Isaac Newton's laws of motion, for instance — which allow us to model how a planet will orbit its sun or how fast an object will fall — first required the invention of calculus.

But math isn't just useful for introducing or developing a new physical theory. Long after physicists have established a theory, mathematicians comb over it with the rigor that their field demands, intent on placing it on more solid logical footing. This cleanup work can take decades, but it's necessary to establish deeper trust in physical ideas.

There's an entire field devoted to the mathematical study of physics-inspired problems, aptly called mathematical physics. One of its core aims is to work out the precise consequences of the complicated mathematics at the heart of general relativity. In 1915, Albert Einstein showed that the shape of our four-dimensional universe — composed of three spatial dimensions plus one dimension of time — is determined by the matter that lives within it. That shape in turn gives rise to what we experience as gravity. From the mathematics of general relativity, bizarre aberrations like

black holes emerge. Even a century later, many of these phenomena remain mysterious. And so mathematicians continue to pore over Einstein's equations, using them as a conceptual laboratory in which to test out new hypotheses, gain novel insights and prove ideas that physicists might take for granted.

Quanta has covered a lot of recent research on the mathematics of space-time, thanks in large part to the work of contributing writer Steve Nadis.

What's New and Noteworthy

Long after physicists have accepted something as true, it's often left to mathematicians to give it a rigorous foundation and to build a complete, coherent framework around it.

Einstein's general theory of relativity predicts how the matter that fills space-time, like [MOU1] stars and galaxies, warps and curves its shape. But the equations that describe this are notoriously hard to work with. For example, physicists have long accepted that Einstein's equations imply that less matter means less warping — that is, flatter space. But it wasn't until last year that mathematicians definitively proved it. Similarly, a common assumption in physics holds that, unlike the other shapes that space-time might take, a negatively curved universe is deeply unstable: Any matter placed within it will eventually collapse into a black hole. Yet mathematicians were only recently able to verify this.

Mathematical proofs don't always go the way physicists expect. In August, for instance, Quanta reported on how a pair of mathematicians felled the great Stephen Hawking's "third law" of black hole thermodynamics. Fifty years ago, Hawking and two other physicists conjectured that "extremal" black holes, which pack so much electric charge or spin that they behave in incredibly counterintuitive ways, are mathematically impossible. But the new proof demonstrates that they can exist — at least in theory.

Of course, mathematicians do more than clean up physicists' mess. They can also provide new and important insights. By rigorously redefining long-standing models of how fundamental particles interact, mathematicians have been able to offer a better understanding of how quantum gravity

might work. They've also been able to explore black holes more deeply. Even though physicists can now observe black holes in the real world, they still can't tell you whether any given patch of matter-filled space will eventually turn into one. Mathematicians can — and they're getting really good at it. It was a mathematician, Roy Kerr, who realized in 1963 that black holes could rotate, and another who, two years ago, proved that such a black hole is stable.

Mathematicians' emphasis on abstraction also lets them take black holes into weird worlds physicists might not even imagine. It turns out that in a five-dimensional universe, for instance, black holes wouldn't have to be spherical anymore. They can instead come in all sorts of exotic forms.

Whether they're providing theoretical scaffolding or exploring concepts in the n th dimension, mathematicians have been instrumental in propelling physics forward. And with gravity and quantum mechanics still at odds, space-time is one area where mathematical ideas tend to lead rather than follow.

By Joseph Howlett for Quanta

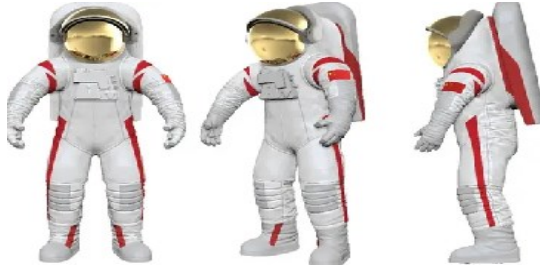
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China's Lightweight Lunar Spacesuit for 2030 Moon Landing

China has unveiled its first-ever lunar spacesuit design, advancing its plans for a crewed moon landing by 2030.



Third Space Suit Technology Forum in Southwest China's Chongqing Municipality

The China Manned Space Agency (CMSA) unveiled a lightweight spacesuit following four years of research and development. State broadcaster CCTV reported that the suit is designed to protect astronauts during extravehicular activities in the harsh lunar environment.

The suit is crafted from fabric designed to shield against heat and lunar dust. It includes protective gloves for dexterity and knee joints for flexible movement in the moon's low-gravity conditions.

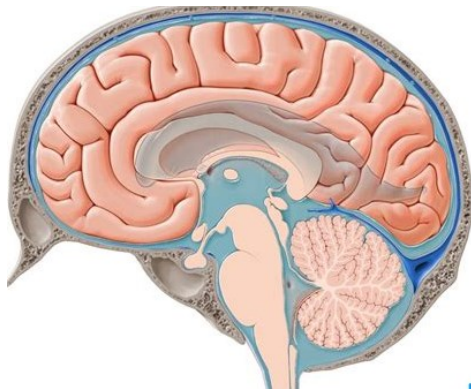
The suit features a panoramic antiglare visor and a console that integrates with communication systems and a video camera. Its design is intended to symbolize strength and resilience, according to the Astronaut Centre of China.

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Brain Fluid May Travel to Distant Parts of the Body

The finding could lead to new ways to deliver drugs



kenhub.com

One might think “cerebrospinal fluid” only lives in the brain and spinal cord. Indeed, that’s what scientists and doctors have largely believed for centuries. But the clear liquid—which cleans, feeds, and protects the organs it surrounds—also bathes the [body’s nerves](#), researchers report today in Science Advances.

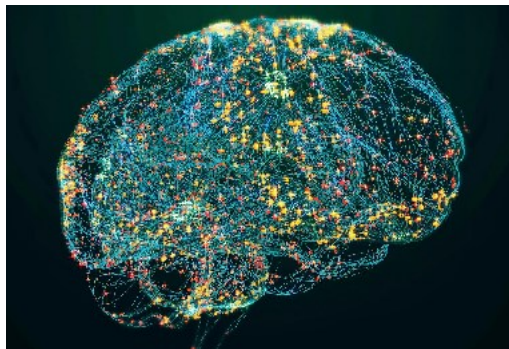
The human body is a bundle of nerves. Besides the head honchos that make up the central nervous system—the brain and spinal cord—kilometers of spindly fibers snake their way throughout our anatomy. Here, they form a peripheral nervous system that fires the signals that allow us to do everything from walking to feeling pain. Yet even though the two systems interface, previous anatomy studies indicated CSF was restricted to the central nervous system

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The Brain Has Waste-Clearing Pathways

...and It Cleanses Itself During Sleep



noppaint/ istock

In the fight to prevent and better understand Alzheimer’s disease, a research team is investigating the link between mental “waste” and cognitive decline. It turns out, our brains are not so different from our homes in that they need a good cleaning from time to time to stay in tip-top shape.

For the [study](#), published October 7th, scientists used special imaging to observe people undergoing brain surgery. They found that their brains created efficient cleaning channels to help move waste out of the brain, particularly during sleep. While this plumbing network of sorts was previously discovered in mouse brains and suspected to exist in human brains, it wasn’t confirmed until this paper.

“Nobody has shown it before now,” senior author Juan Piantino said in a statement. “I was always skeptical about it myself, and there are still a lot of skeptics out there who still don’t believe it. That’s what makes this finding so remarkable.”

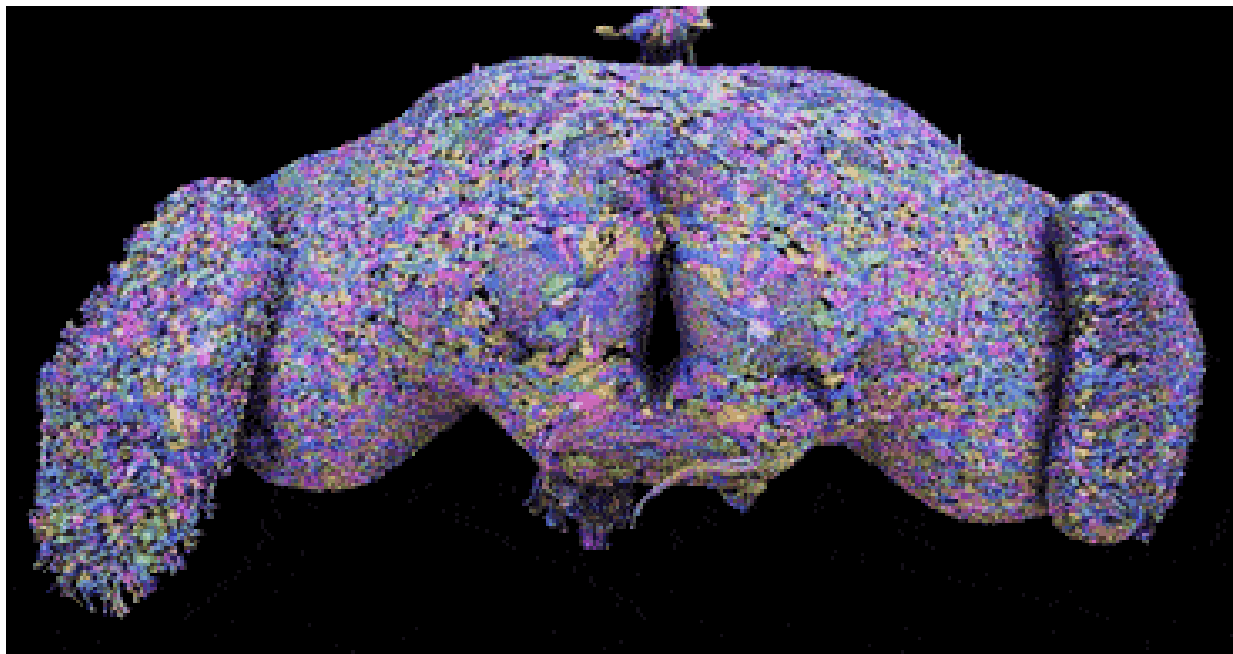
The information tracks with other studies that note chronic sleep deprivation as a risk factor for dementia, and provides further evidence for the [importance of lifestyle interventions](#) when it comes to preventing cognitive decline.

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A Decade in the Making: Complete Map of a Fly's Brain Unveiled



Thousands of neurons are tightly packed in the fly's brain.
Tyler Sloan/FlyWire

If you've ever used Google Maps or a similar app to get around a new city, you know it shows you all the buildings, avenues, streets, and intersections. Well, neuroscientists just created that, but for a [fruit fly's brain](#)—and it's a big deal.

Since the publication of *C. elegans*'s 302-neuron connectome in 1986, researchers have created partial connectomes for fly, mouse, and human brains. But now, after a monumental effort that put AI tools and hundreds of volunteers together, researchers have unveiled the first complete connectome of an adult female fruit fly, an insect species widely used as a model organism.

The final map, published in a package of papers in *Nature* by the FlyWire Consortium, charts [149 meters of wiring](#) packed in a brain the size of a grain of sand. It also includes 54.5 million synapses among about 140,000 neurons, which the team classified into [more than 8400 types](#), many of which are newly identified.

"This achievement is not just remarkable, it's outstanding," says Max Planck neuroscientist Moritz Helmstaedter, who was not involved in the project. Researchers can now finally make sense of how functions such as vision and olfaction work in the fly, and probe more complex behaviors such as navigation and decision-making.

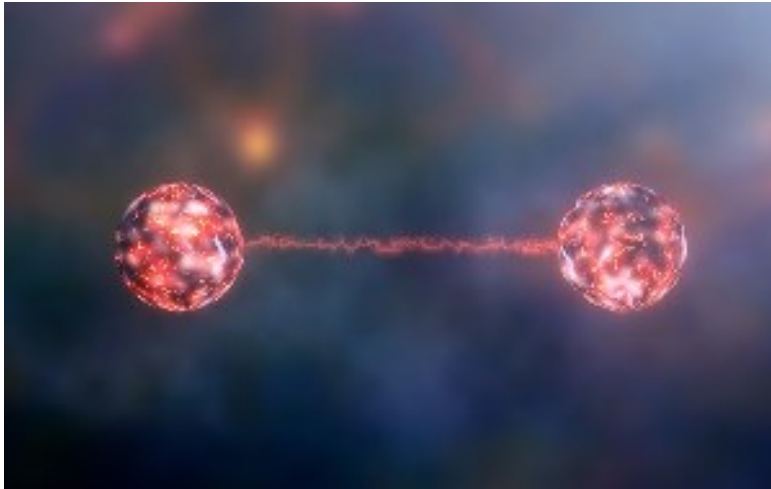
FlyWire has allowed researchers access to the data since the beginning, and more than 50 papers have used the fly connectome already. "We all benefit from the democratization of science," Allen Institute neuroanatomist Nuno Maçarico da Costa, who was also not involved in the project, tells ScienceAdviser. This open and crowdsourcing model serves as a guide for other connectome projects. The zebrafish connectome will likely be finished in the next few years, and the mouse and human brains could come after that.

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What Is Entanglement and Why Is It Important?



Caltech

Entanglement is at the heart of quantum physics and future quantum technologies. Like other aspects of quantum science, the phenomenon of entanglement reveals itself at very tiny, subatomic scales. When two particles, such as a pair of photons or electrons, become entangled, they remain connected even when separated by vast distances. In the same way that a ballet or tango emerges from individual dancers, entanglement arises from the connection between particles. It is what scientists call an emergent property.

<https://bit.ly/3XQjivP>

Good Video

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The Future of Farming



Deere

Some of the first technologies humans made, at least after the ones for killing things and chopping them up, were for farming. Plows, hoes, etc. — crops themselves are technologies of a kind, bred from wild cousins.

Still, agriculture isn't something we've solved. It requires lots of land and fossil-fuel derived inputs; its runoff mucks up the water; and it still relies heavily on the capriciousness of the weather. Climate change is making all of this harder, as a world population set to keep growing for awhile means more mouths to feed.

Maybe artificial intelligence can help. Recent years have seen the introduction of various agricultural tools powered by AI. Many of them focus on the specific problem [of herbicide application](#).

Deere & Co., the maker of John Deere-brand equipment, now sells a special spraying boom equipped with dozens of cameras and a graphics processor trained to identify, say, Palmer amaranth, a fast-growing, nutritious flowering plant native to North America — or, as it's known to soybean farmers, a weed. The boom, as it's towed through the field, zeroes in on and sprays stubborn interlopers like these rather than the cash crops around them. A Canadian startup called Precision AI is using AI-powered drones to do something similar.

In a statement this week, Deere said results from the 2024 growing season showed its "See & Spray" technology cut down on herbicide use by an average of nearly 59%. Still, the technology has yet to be widely adopted, points out Christopher Ciolino, a Bloomberg Intelligence analyst who covers US machinery companies. "I don't think there's enough data out there yet for us to draw any meaningful conclusions," he said.

Deere seems set on changing that this year with a new aggressive pricing strategy. The company and its competitors are hoping to drive — and profit from — a change from the last few decades in industrial agriculture in which "targeting" was determined chemically: soy, corn, cotton and other cash crops genetically engineered to be resistant to particular herbicides. Those altered crops allowed (and, critics would argue, encouraged) farmers to spray with abandon.

It remains to be seen how the AI technology works at scale in the real world, and if farmers will trust it enough to lay off the spraying. But farmers have shown a willingness to embrace new things like drones and, for that matter, genetically modified seeds. Farms, like factory floors, are increasingly automated — higher-end tractors already basically drive themselves.

In this case, the economic logic is clear — the cost of herbicide adds up. Using less of it also would mean less runoff and less collateral damage to plant and animal life outside farms, and less use of chemicals that, depending on which jury you believe, may or may not have given people cancer.

Those are all good things. It's a reminder that many of the most promising applications for AI don't involve ChatGPT-style large language models. And they aren't the things that get the most publicity. People may continue to garden, but increasingly it's the machines that will farm.

Drake Bennett for Bloomberg

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Ray-Ban Meta Smart Glasses Actually Make the Future Look Cool

While Meta hasn't reinvented the category, it's nailed the execution. But culturally, is the timing right for smart glasses?



I often felt like I was in a spy movie when wearing these.
The Verge

To be clear, nothing about the Ray-Ban Meta smart glasses is revolutionary. The Google Glass Explorer Edition first introduced us to modern-day smart glasses in 2013. Several other companies, big and small, have since jumped on the bandwagon, including Snap, Bose, Razer, Epson, Amazon, and the now-defunct Focals by North. Most were underwhelming, with potato cameras, washed-out displays, useless voice assistants, and middling mics.

If you're into photography, you'll be able to suss that the quality doesn't match up to the latest and greatest phones. But it's good enough to match a phone from a few years ago and, therefore, shareable on social media and in the group chat. That's a Big Deal.

The Good

- Improved photo, video, and audio quality
- You sound good on calls!
- Stylish, with many options for frames and lenses
- Importing photos and videos is easy

- Charging case design is also much better

The Bad

- Voice assistant is a lil slow
- Cool AI features not available yet
- LED privacy indicator still too subtle
- Battery life improved but could be better

<https://www.theverge.com/23922425/ray-ban-meta-smart-glasses-review>

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Did we kill the Neanderthals?

A complex picture of how Neanderthals died out, and the role that modern humans played in their disappearance, is emerging.



A reconstruction of a late Neanderthal from El Salt, southeastern Spain. Some of the last Neanderthals may have lived in the Iberian peninsula. Our closest human relatives may have died out thanks to a combination of factors, including isolation, inbreeding and competition from modern humans, emerging research suggests.

(Image credit: Fabio Fogliazza)

By 34,000 years ago, our closest relatives had effectively gone extinct. But because modern humans and Neanderthals overlapped in time and space for thousands of years, archaeologists have long wondered whether our species wiped out our closest relatives. This may have occurred directly, such as through violence and warfare, or indirectly, through disease or competition for resources.

When modern humans and Neanderthals met tens of thousands of years ago, the latter were probably already in trouble. Genetic studies suggest that Neanderthals had lower genetic diversity and smaller group sizes than modern humans, hinting at a potential reason for Neanderthals' demise.

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Apollo 17 at 50 - Revisit the last time humans were on the Moon

Hear Jack Schmidt tell how he hit the [alluvial] fan



NASA

The Apollo program, also known as Project Apollo, was the United States human spaceflight program carried out by the National Aeronautics and Space Administration, which succeeded in preparing and landing the first men on the Moon from 1968 to 1972.

<https://youtu.be/K2inmFLZTZc?t=3>

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New Gels Could Protect Buildings During Wildfires

Researchers at Stanford Engineering have developed a sprayable gel that creates a shield to protect buildings from wildfire damage. It lasts longer and is more effective than existing commercial options.



During a test on plywood, researchers showed how the new gel transitions from a hydrogel to an aerogel under heat from a gas hand-torch. The torch burned at a much higher temperature than would result from a wildfire.

Andrea d'Aquino

As climate change creates hotter, drier conditions, we are seeing longer fire seasons with larger, more frequent wildfires. In recent years, catastrophic wildfires have destroyed homes and infrastructure, caused devastating losses in lives and livelihoods of people living in affected areas, and damaged wildland resources and the economy. We need new solutions to fight wildfires and protect areas from damage.

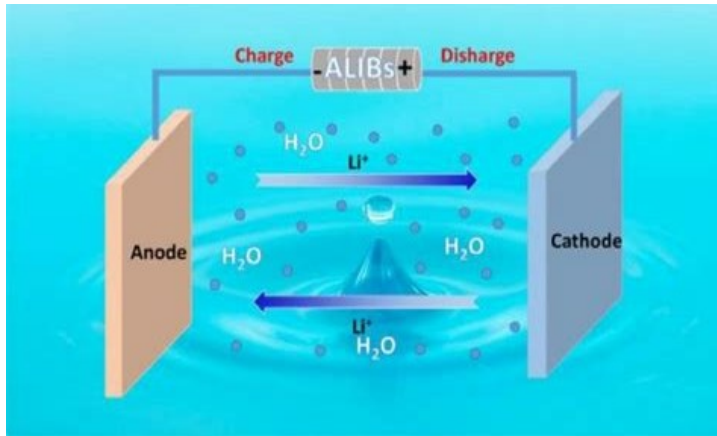
Researchers at Stanford have developed a water-enhancing gel that could be sprayed on homes and critical infrastructure to help keep them from burning during wildfires. The research, published Aug. 21 in *Advanced Materials*, shows that the new gels last longer and are significantly more effective than existing commercial gels.

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A Safe, Reliable, and Cheap Battery for Electricity Grids

Funded by the U.S. Department of Energy, Scientists at Stanford, SLAC, and 13 other institutions are seeking to overcome the major limitations of a battery by using water as the primary component of its electrolyte.



21stcentech.com

How do you store electricity in a way that is large and powerful enough to support the electric grid, as well as reliable, safe, environmentally sustainable, and inexpensive? One way may be to make a major component of the rechargeable battery mostly from water and the rest of the device primarily from abundant materials.

That is the vision of dozens of the best energy storage experts from 15 research institutions across the United States and Canada, led by Stanford University and SLAC National Accelerator Laboratory. After a competitive process, the U.S. Department of Energy today announced its support for this energy hub research project, called the Aqueous Battery Consortium. The project can receive up to \$62.5 million over five years as part of the DOE's Energy Innovation Hubs program. The other battery-centered Energy Innovation Hub announced today by the DOE is the Energy Storage Research Alliance, led by Argonne National Laboratory.

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Found an extra pair of boots at the worksite so I decided to give my boss a heart attack



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What's McDonnell's?

Here's why McDonald's created a dupe restaurant in Los Angeles



The rise of dupe culture.

The rollout is meant to introduce McDonald's signature Big Mac "to a whole new generation of fans," the company's U.S. chief marketing and customer experience officer Tariq Hassan said in a statement; and in addition to the dupe restaurant, the burger chain partnered with streamer Kai Cenat, a "Big Mac superfan," to livestream people's reactions to eating the sandwich.

"By tapping into some of our fans' biggest passions from dupe culture to live-streaming, we're able to serve up more than just a sandwich," Hassan said.

But the new item is also meant to increase sales in an important product category. McDonald's CEO Chris Kempczinski said during a July earnings call that McDonald's chicken sales were "now on par with beef sales" and "a significant opportunity for growth." Consumers had grown more discriminating in their spending, he said, and the company has responded with value meals and smaller sizes. Now, a chicken version of one of its most popular menu items could bring even more new customers through that door.

By Hunter Schwarz for Fast Company

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The Crackdown on Compounded GLP-1 Meds Has Begun

Now that the Mounjaro and Zepbound shortage is over, Eli Lilly is going after the cottage industry selling "compounded" versions of its meds.



NURPHOTO GETTYIMAGES

This isn't the first legal action Eli Lilly has taken regarding compounded tirzepatide. The pharmaceutical behemoth has filed a number of lawsuits alleging deceptive advertising from sellers promoting "generic tirzepatide" or "generic Mounjaro" and referring to their compounded products as "FDA-approved." (Unlike standard name-brand and generic pharmaceutical drugs, compounded drugs are not subject to the FDA's approval processes before hitting the market.) But this represents a major escalation of Lilly's fight against what it views as knockoffs.

The compounding GLP-1 industry has already started to launch its own offensive to stay in business. Shortly after the shortage ended, a compounding trade group called the Outsourcing Facilities Association filed a lawsuit in a Texas federal court against the FDA, claiming that tirzepatide remains in short supply and that the decision to officially end the shortage is "abruptly depriving patients of a much-needed treatment and artificially raising drug prices."

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First Salmon Spotted in Klamath River After Dam Removal Project



Mark Hereford, ODFW

In August, the last of the four dams in the Klamath River along the California-Oregon border was officially removed — a milestone preceded by decades of advocacy efforts by Indigenous communities and conservationists. Already, the completed project is

making a splash, as a Chinook salmon was recently spotted swimming upstream in a previously blocked area.

That salmon is the first anadromous fish to return to the Klamath Basin in Oregon since 1912, when the initial dam was built, the Oregon Department of Fish and Wildlife announced. The organization said the fish, and others, likely traveled over 200 miles from the Pacific Ocean.

"The return of our relatives, the c'iyaa's [salmon], is overwhelming for our tribe. This is what our members worked for and believed in for so many decades," Roberta Frost, the Klamath Tribes secretary, said in a statement, adding: "I want to honor that work and thank them for their persistence in the face of what felt like an unmovable obstacle. The salmon are just like our tribal people, and they know where home is and returned as soon as they were able." [Watch the first salmon swim.](#)

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'NASA at a Crossroads

Budget woes, aging infrastructure and hard choices ahead



*Moon to Mars exploration is on NASA's agenda, but the space agency faces infrastructure, budgetary issues here on Earth.
(Image credit: NASA)*

The [report](#), which was released last month, is called "NASA at a Crossroads: Maintaining Workforce, Infrastructure and Technology Preeminence in the Coming Decades." And that title was chosen advisedly.

The report identifies out-of-date infrastructure, pressures to prioritize short-term objectives, [budget mismatches](#), inefficient management practices and nonstrategic reliance on commercial partners as the core issues.

Bureaucracy at its worst... Boeing and NASA. Both need to look at SpaceX.

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The Volkswagen ID Buzz Is Finally Here.

One of the most beloved vehicles of the 20th century returns as an electric family fun machine. The high price and the low range might raise some eyebrows, but this van delivers.



VW

With the 2017 [unveiling](#) of the ID Buzz concept, Volkswagen announced that the iconic VW bus—forever a symbol of beachy road trips and 1960's hippie freedom—was returning to the market as an EV. The hype machine went into overdrive.

Jump to 2024, and the vehicle that has been on roads in Europe for about two years is finally, finally, making its way onto US shores.

At \$60kplus tax and license, only very entitled hippies can afford them.

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White House Public Tour Gets Makeover



*Diplomatic Reception Room
Judy Kurtz*

The White House public tour is getting an extreme makeover, with new digital exhibits, an expanded route and more access to rooms poised to be part of the “reimagined” experience for visitors.

Permanent digital displays, known as a “living timeline,” will also replace static photographs and images in the East Colonnade.

<https://bit.ly/3C3rKPS>

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Becoming an Ace at Disc Golf

The effects of thumb position on backhand disc golf throws of a mid-range disc.



Exactly like this, according to actual, real peer-reviewed and published research.

drew teasley

Disc golf is a relatively young sport that has experienced consistent growth since its inception, and the disc golf community has significantly grown in popularity over the past several years. The sport was invented based on various flying toy discs contrived in the mid-twentieth century.

The idea evolved until Wham-O produced a Pro Model disc in 1964, and disc golf officially became a professional sport in 1976. As of 2022, the Professional Disc Golf Association (PDGA) reported a total of 130 700 registered members, which represents 19% and 84% increases over 1 and 2 year spans, respectively, with over 10 000 courses existing worldwide and nearly 9000 sanctioned events held throughout the year. Even with the growing popularity, there is a general lack of research devoted to the mechanics of disc golf throws.

<https://bit.ly/3UkmOMU>

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What's the Difference Between a Tsunami and a Tidal Wave?

Tsunamis and tidal waves are the powerful types of wave on Earth, but very different processes are involved in their formation.



*The 2011 tsunami wave hitting the coast of Minamisoma in Fukushima prefecture.
(Image credit: -/JLJI PRESS/AFP via Getty Images)*

Tidal waves and tsunamis — the two most powerful types of wave on Earth— are often confused in popular discourse. While the terms are sometimes used synonymously, tidal waves and tsunamis actually have distinct causes.

"The English term tidal wave dominated until the 2004 Indian Ocean tsunami, partly because most tsunami observations until then described water phenomena that resembled fast advancing or fast-receding tides," Costas Synolakis, director of the Tsunami Research Center at the University of Southern California, told Live Science. "In 2004, we got access to several videos from the tsunami in Indonesia and Thailand, and realized that giant tsunamis do not resemble tides."

<https://bit.ly/48nFv8h>

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Trojan General Holding His Cat While Picking Up a Package from Amazon....



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Chick-Fil-A's Streaming Service Is Actually Way Bigger Than That

What is Chick-fil-A Play? Inside the food chain's surprisingly logical next move.



[Photo: Chick-fil-A]

In late August, Deadline reported that Chick-fil-A was “moving aggressively into the entertainment space,” developing a slate of original content for an alleged proprietary streaming platform. “The fast-food firm has been working with a number of major production companies, including some of the studios, to create family-friendly shows,” it reported, citing sources close to the deals. The programming was said to span animated shows, reality shows, and game shows, with budgets running to \$400,000 per half-hour episode, and the whole platform set to debut later this year.

bit.ly/4f1YjfI

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The Firebird III Was Peak General Motors Whizbang Design



General Motors

Today's cars all seem to blend together in their shape and form. All seemingly amorphous crossover-like SUVs and the like. That wasn't always the case. Indeed, car design was once an arms race about who could create the most different, the most new, and the most innovative.

While the Firebird III was never destined for production, it was a testbed of new technology at the time.

<https://bit.ly/4hg2fuR>

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We Were Wrong To Panic About Secondhand Smoke



Wernher Krutein)

A recent American Cancer Society study reports a negligible risk from passive smoking, shedding new light on the uproar over a 2003 paper.

In 2003, UCLA epidemiologist James Enstrom and Geoffrey Kabat published a study of environmental tobacco smoke (ETS)—also called "secondhand smoke" or "passive smoking"—in the British Medical Journal (BMJ). Using data from the American Cancer Society's prospective study of 1 million adults, we concluded that ETS exposure was not associated with increased mortality.

A recent study by American Cancer Society (ACS) researchers underscores that point by showing that, contrary to what the critics asserted, the cancer risk posed by ETS is likely negligible. The authors present that striking result without remarking on it, which may reflect their reluctance to revisit a debate that anti-smoking activists and public health officials wrongly view as long settled.

<https://bit.ly/3BLYtJH>

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The Science of “Luck”

Are some people just lucky, or do they make their own good or bad fortune?



Or is luck more psychology and sociology than superstition?

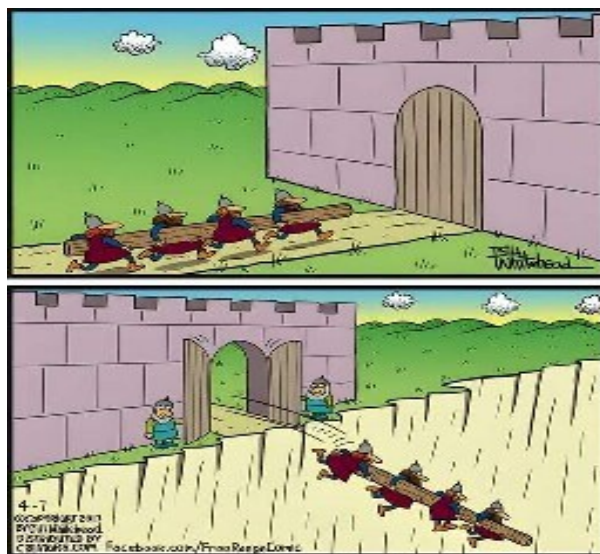
Image credit: James Rodrigues, modified from iStock

Throughout history, humans have experimented with various ways to promote good fortune and, more importantly, to avoid disasters. Some common examples of fostering luck include carrying lucky charms, making wishes on stray eyelashes, or blowing out candles on a birthday cake, while actions taken to avoid bad luck include knocking on wood and throwing salt over a shoulder.

In addition, some people will avoid circumstances that bring bad luck, such as walking under ladders or having anything to do with the number 13. Perhaps you have a special ritual of your own that you feel offers some protection from bad luck or encourages success in your life. If you do, you are not alone, and research suggests that such superstitions may serve a psychological purpose.

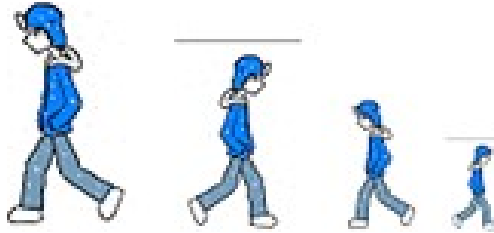
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My Walking Thoughts



For Sunday November 3 2024

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Deep in the Outskirts of Texas

I ended last week's Walking Thoughts on the trip from the Lethean waters of New Orleans, to Naval Air Station Corpus Christi, where I checked in and was told to come back after the weekend. Fuel and a burger on the trip drained my resources by only a couple of bucks, leaving me with \$46 plus some coins... enough cash to check out the local scene.

Heading out on Saturday afternoon with visions of cattle drives and cowboys blowing one another to kingdom come in my mind's eye, I found the local scene boringly tame, probably because as a "dry" state, there was not much call for shootouts and barroom fights. Disconsolate in the wake of my surprise discovery, I was heading back to the base, when a carload of young ladies pulled alongside my strange contraption and after a little roadside chit-chat was told, "follow us."

I did, and learned that the way around government decreed gentrification was membership in a club, the initiation fee for which it turned out was something in the neighborhood of a buck. There were some other rules but I can't imagine I bothered to learn them as there were more interesting benefits to explore. A couple beers and a burger for the three girls and me cleared another \$10 from the catacombs of my wallet, leaving me with enough for another such night on the town.

As we parted at the curb pledging each other undying memories of the evening, one of the young ladies asked if I liked to sail.

"Of course," I answered in a manner suggesting I was was the scourge of the seven seas. We agreed to meet the following morning at the gate of the base marina. "Whoo-hoo," I thought. "I'm headed for the bounding main."

As has been a recurring theme in my life, things were not quite as I had envisioned when we met the next morning and headed for our rendezvous with fate. The fate it turned out was a 36 foot sailboat captained by her father, a real Navy captain, who glared at me with the unrestrained distrust of someone who once had been my age and

had recognized time immemorial designs on young ladies not much different from his bouncing baby girl.

It was clear this was not destined to be a pleasure cruise, particularly when he started spewing out orders in nautical-speak—such things as halyards and stays, stuff well beyond the ken of inveterate landlubbers such as I, who once had to cheat in order to gain a cub scout merit badge in knot tying.

My voyage of disgrace lasted a scant five hours, never more than three miles from terra firma...enough for me to downgrade my seafaring experience to juvenile splashings in the bathtub, so it was with abject embarrassment I slunk away to a solo evening at the BOQ.

The next morning, showered, shaved, and properly attired in uniform of the day, I reported to the headquarters to receive my orders. The chief petty officer at the front desk found my name on his list and pointed to the door with the sign, Personnel Officer. I knocked, received the command, "Come," and entered to face — you probably guessed it — the Captain from the day before... this time with four gold stripes on his sleeve.

"Oh-oh," the little voice in the back of my head groaned. "Do you suppose they send flight students to Adak, Alaska?" To my surprise, the captain smiled, looked through a sheaf of papers, and extracted my orders, and said, "Kingsville... 60 miles southwest of here. You'll like it there." I read that as shorthand for, "Hopefully enough to keep you away from my daughter."

In a further surprise as he stood to hand me my orders, he added, "We look forward to seeing you again."

I said, "Thank you sir," accepting the envelope, but not before my little voice beat me to the response, "Not going to happen."