Ode to E Pluribus Unum for Sunday May 25 2025

==========

A Plutonian Landscape

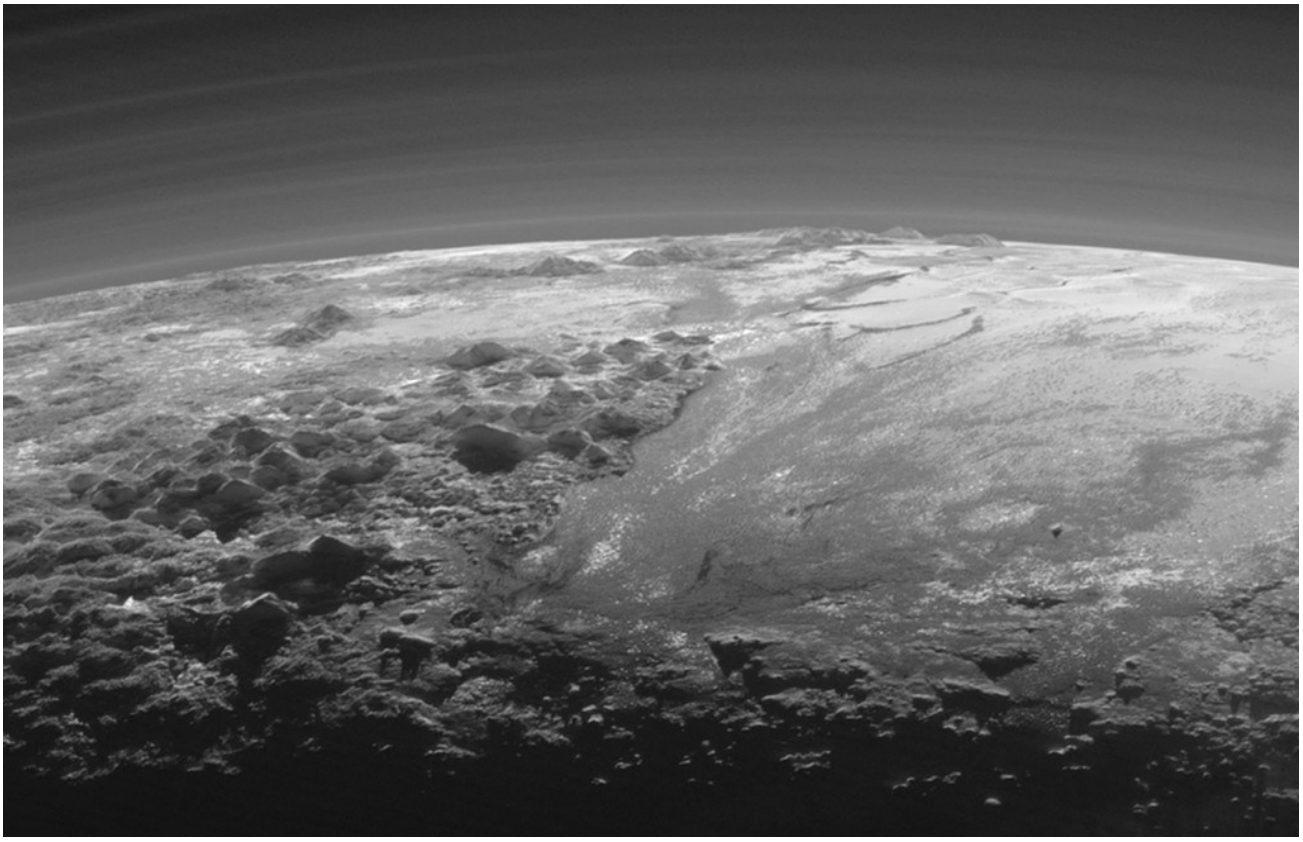


Image Credit: NASA, Johns Hopkins Univ./APL, Southwest Research Institute

This shadowy landscape of majestic mountains and icy plains stretches toward the horizon on a small, distant world. It was captured from a range of about 18,000 kilometers when New Horizons looked back toward Pluto, 15 minutes after the spacecraft's closest approach on July 14, 2015.

The dramatic, low-angle, near-twilight scene follows rugged mountains formally known as Norgay Montes from foreground left, and Hillary Montes along the horizon, giving way to smooth Sputnik Planum at right. Layers of Pluto's tenuous atmosphere are also revealed in the backlit view.

With a strangely familiar appearance, the frigid terrain likely includes ices of nitrogen and carbon monoxide with water-ice mountains rising up to 3,500 meters (11,000 feet). That's comparable in height to the majestic mountains of planet Earth. The Plutonian landscape is 380 kilometers (230 miles) across.

Might this be Poe's Night's Plutonian Shore, perhaps?

==========

Jester's Cap

Last week, Joe Horton responded a study presented in our May 11th Ode regarding the apparent loss of water in landmasses, asking 'where did all the water go?

"OK, I give up" Joe says. "Where did all the water go? Sea level rising? If so, we should actually see it rise. No one has. In clouds? Also not correct since it's no cloudier now than it used to be. And if it had done that, we'd have more rain, not less, which would lead to the ground being wetter, not drier.

"What this suggests--if true--is that the polar ice caps are growing rather than shrinking, which would mean we're heading back toward another mini-ice age. Which would contradict the idea that the earth is heating up. This whole article appears to me to be inconsistent with any form of rational probability."

In response to his assessment, I received the following response from Odester, Katherine Holden:

AI Overview from MetLink - Royal Meteorological Society The Changing Water ...

As temperature increases on land, water is lost through evaporation, a process where liquid water turns into water vapor and rises into the atmosphere. This happens because higher temperatures provide more energy to water molecules, making it easier for them to break free from the liquid state and become vapor.

Here's a more detailed explanation:

Energy Input:

Solar radiation and heat from the air are the primary energy sources that drive evaporation. As temperature rises, water molecules gain kinetic energy, increasing their movement and making them more likely to escape the surface of the water.

Surface Area:

Evaporation primarily occurs from the surface of bodies of water, soil, and plant surfaces. The larger the surface area exposed, the more water is available for evaporation.

Humidity:

The amount of water vapor already in the air (humidity) also affects evaporation. If the air is humid, it can hold less additional water vapor, slowing down the rate of evaporation. Conversely, drier air promotes higher evaporation rates.

Wind:

Wind plays a crucial role in carrying away water vapor from the surface, allowing more evaporation to occur. Wind helps to remove saturated air near the surface and replace it with drier air, thus facilitating continued evaporation.

Transpiration:

Plants also contribute to water loss through a process called transpiration, where they release water vapor through tiny pores on their leaves. Transpiration rates are affected by factors like temperature, humidity, and wind speed, similar to evaporation.

Soil Type:

The type of soil can also influence evaporation rates. Soil with larger pores (like sand) allows water to drain more quickly, reducing the amount of water available for evaporation, while clay soils with smaller pores retain more water and may have higher evaporation rates.

In summary, higher temperatures, larger surface areas, lower humidity, wind, and the presence of plants all contribute to increased water loss through evaporation on land.

***

Global humidity is rising, with oceanic humidity increasing more rapidly than over land areas. Is this enough to account for landmass water loss? I don't know. But perhaps you do.

Anyone care to carry on the discussion?

==========

Chords & Riffs

Pink Floyd

ondarock.it

Pink Floyd had moderate mainstream success and was one of the most popular bands in the London underground music scene in the late 1960s as a psychedelic band led by Syd Barrett; however, Barrett's erratic behavior eventually forced his colleagues to replace him with guitarist and singer David Gilmour.

After Barrett's departure, singer and bass player Roger Waters gradually became the dominant and driving force in the mid-1970s, until his eventual departure from the group in 1985.

The band recorded several albums, achieving worldwide success with The Dark Side of the Moon (1973), Wish You Were Here (1975), Animals (1977), and The Wall (1979). In 1985, Waters declared Pink Floyd "a spent force," but the remaining members, led by Gilmour, continued recording and touring under the name Pink Floyd. Although they were unsuccessfully sued by Waters for rights to the name, they again enjoyed worldwide success with A Momentary Lapse of Reason (1987), and The Division Bell (1994). Eventually they reached a settlement out of court with Waters allowing them use of the name. Waters performed with the band for the first time in 24 years on July 2, 2005 at the London Live 8 concert.

***

Comfortably Numb Live in Pompeii 2016 https://youtu.be/LTseTg48568

Another Brick in The Wall https://youtu.be/W0bi7OfaKMY

Learning To Fly https://youtu.be/nVhNCTH8pDs

Time https://youtu.be/Qr0-7Ds79zo

I'm told they were a sixties cat's meow. Perhaps someone can explain it to me.

==========

==========

The Mathematics of Sudden Change

Looking into phase transitions in mathematical systems.

Quanta Magazine

In the real world, physical systems can undergo rapid, dramatic changes: Cool a liquid and it will crystallize into a solid; heat a magnet and it will suddenly lose its magnetism.

But it turns out that these abrupt changes, known as phase transitions, happen in abstract math contexts as well. When mathematicians build a simple system with just a few rules, they often discover that, at a certain point, surprising patterns suddenly emerge. These mathematical phase transitions can give mathematicians a window into how real physical systems work, while also providing them with important insights into how complex behavior can arise from the most straightforward laws.

Phase transitions don't have to involve points and edges, as they do in graphs and percolation systems. They exist in geometry as well. In the 1950s, for instance, the mathematician John Nash found a sharp transition point between smoothness and roughness in shapes. In particular, he studied a process by which shapes can be crumpled without creasing. Mathematicians have continued to study the thresholds at which shapes buckle and transform.

In all these cases, phase transitions beckon mathematicians toward the messiness of the real world. By examining these critical points of change, researchers can study the outermost fringe of mathematical order, where simplicity and complexity touch.

https://www.linkedin.com/pulse/mathematics-sudden-change-quanta-magazine-ahl0e/

==========

US Mint Releases Space Shuttle $1 Gold Coin

The iconic NASA transport represents Florida in the ongoing American Innovation Series.

The Space Shuttle flew on 135 missions between 1981 and 2011.
Credit: US Mint

You can now own a $1 gold coin celebrating one of America's most revolutionary achievements: the NASA Space Shuttle program. The latest variant in the ongoing American Innovation $1 Coin series is available to order through the United States Mint. Selected to represent the state of Florida, the noncirculating legal tender is the third coin released this year and the 28th coin in the 15-year project first announced in 2018.

The United States Mint announced its American Innovation $1 Coin series celebrating American achievements across science and technology in 2018, and has already featured three space-related selections prior to the Florida coin. Delaware's coin from 2018 showcases Annie Jump Cannon, the pioneering astronomer responsible for the star classification system still used today. Meanwhile, Maryland's 2020 entry pays tribute to the Hubble Space Telescope, and Alabama's 2024 release includes the Saturn V rocket. Later this year, Texas will become the fifth space-centric $1 gold coin with its Mission Control design.

https://bit.ly/3GZgoyZ

==========

The Galaxy's Turbulence Doesn't Behave the Way We Thought it Did

This 2D slice of the world's largest simulation of galactic turbulence reveals the chaotic motions of plasma that regulate star formation, with magnetic field lines shown in white.
James Beattie

In the Milky Way Galaxy, the space between stars is far from empty. Instead, it is filled with a roiling sea of gas, dust, and cosmic rays collectively known as the interstellar medium. Here is where stars are born and matter from dying stars gets recycled. Now, using a powerful computer simulation, astronomers have managed to precisely simulate magnetized turbulence in this vast and chaotic region.

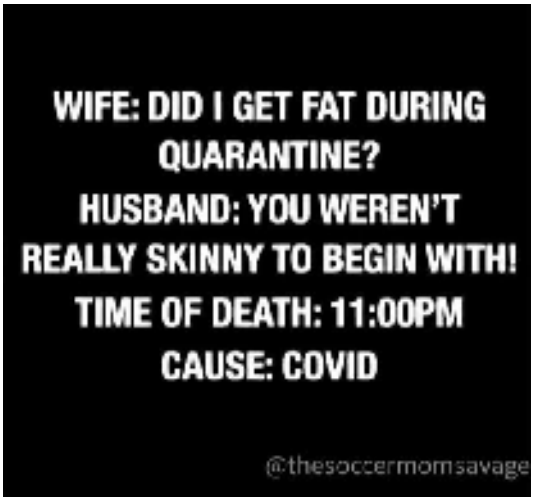
Even though turbulence occurs in everything from the swirl of milk in coffee to oceanic currents and motions of matter in outer space, it remains one of the greatest unsolved problems in physics. There is no complete mathematical framework for predicting how energy moves from large to small scales, and the effects of magnetic fields in space makes modeling even more difficult. For the new model, scientists relied on the equivalent of 140,000 computers running in parallel, enabled by one enormous supercomputer. "To put these massive simulations into perspective: if we had started one on a single laptop when humans first domesticated animals, it would just be finishing now," lead study author James Beattie explains in a statement.

The new large-scale simulation challenges existing theories of how magnetized turbulence works, showing that energy moves differently at different scales: Magnetic fields alter the way energy moves through the interstellar medium, suppressing small-scale motion while boosting wave-like ripples known as Alfvén waves. The findings could reshape how scientists think about the birth of stars and improve space weather monitoring and prediction to protect satellites and future space travelers. "The dream is

to discover universal features in turbulence across the Universe," says Beattie, "and we'll continue pushing the limits of the next generation of simulations to test that idea."

https://bit.ly/4kjaIhB

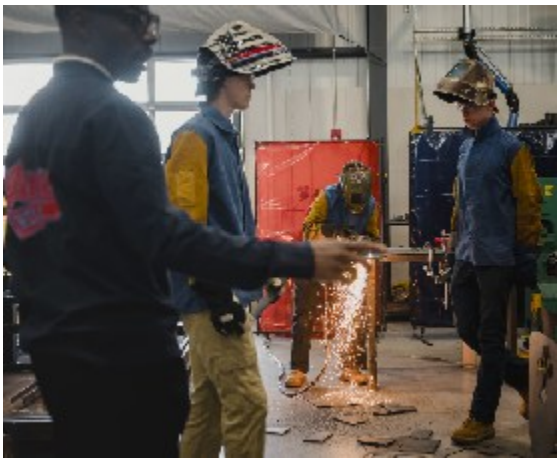
==========



==========

The High-School Juniors With $70,000-a-Year Job Offers

Companies with shortages of skilled workers look to shop class to recruit future hires; 'like I'm an athlete getting all this attention from all these pro teams'



Welding instructor Joe Williams, left, teaches students at Father Judge High School in Philadelphia.
Photographs and video by Hannah Yoon for WSJ

PHILADELPHIA—Elijah Rios won't graduate from high school until next year, but he already has a job offer—one that pays $68,000 a year.

Rios, 17 years old, is a junior taking welding classes at Father Judge, a Catholic high school in Philadelphia that works closely with companies looking for workers in the skilled trades. Employers are dealing with a shortage of such workers as baby boomers retire. They have increasingly begun courting high-school students like Rios—a hiring strategy they say is likely to become even more crucial in the coming years.

Employers ranging from the local transit system to submarine manufacturers make regular visits to Father Judge's welding classrooms every year, bringing branded swag and pitching students on their workplaces. When Rios graduates next year, he plans to work as a fabricator at a local equipment maker for nuclear, recycling and other sectors, a job that pays $24 an hour, plus regular overtime and paid vacations.

https://bit.ly/3EVWsMV

==========

Is the AI Revolution Underhyped? Eric Schmidt Thinks So

Former Google CEO, Eric Schmidt
gadgets360.com

The arrival of non-human intelligence is a very big deal, says former Google CEO and chairman Eric Schmidt. In a wide-ranging interview with technologist Bilawal Sidhu, Schmidt makes the case that AI is wildly underhyped, as near-constant breakthroughs give rise to systems capable of doing even the most complex tasks on their own. He explores the staggering opportunities, sobering challenges and urgent risks of AI, showing why everyone will need to engage with this technology in order to remain relevant.

https://www.youtube.com/watch?v=id4YRO7G0wE

==========

FLASHMOB CENTRAL

Flash Mob at the Bank of America Building, NYC—a Reunion

Remember last week's Flash Mob? Here they are ten years later

buildingrenewable.com

https://youtu.be/rq9TgLE7ePw?t=1

`==========

First Ever Image Of "Free Floating" Atoms

Two light systems trap the atoms and snap their photo.

Atoms have been seen clumping up, pairing up, and staying alone thanks to a new technique.
Image Credit: Sampson Wilcox

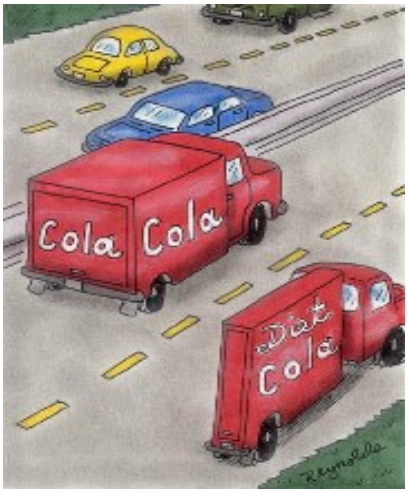
Scientists now have a new approach to study never-before-seen quantum phenomena. Physicists from the Massachusetts Institute of Technology have produced the first images of atoms freely interacting in space, showing correlations that had been predicted in theory but never directly photographed before.

The team's Atom-Resolved Microscopy is done in this way. Atoms are allowed to move about and interact freely. The researchers then turn on a lattice made of light that, for a fraction of a second, freezes the atoms. At the same time, another laser system illuminates the atoms, creating a picture before the atoms are allowed to move again.

The team used two atomic gases, one made of sodium atoms and the other of lithium atoms. The two behave in different ways. The sodium would act like a boson, which means particles can end up in the same quantum state and act like a single quantum wave. Lithium was a fermion gas, meaning only one atom at a time can be in a specific quantum state. This gave rise to these atoms pairing up, like electrons do in superconductors.

https://bit.ly/3RUTTxs

==========



The Rise and Fall of the Byzantine Empire

Knightstemplar.co

The Byzantine Empire was the eastern half of the Roman Empire, beginning in 330 CE and lasting until 1453 CE—1,000 years longer than its western counterpart. Unlike the classical, pagan Roman Empire, Byzantium was Christian, mostly Greek-speaking, and centered on the city of Constantinople (modern Istanbul). But until the end, the Byzantines called themselves "Romaioi"—Romans.

Unlike the classical, pagan Roman Empire, Byzantium was Christian, mostly Greek-speaking, and centered on the city of Constantinople.

The Byzantine Empire played a vital role in the literature of Classical Greece reaching Western Europe. The Byzantines were also responsible for the definitive compilation of Roman law, and the expansion of Orthodox Christianity into Russia and the Balkans.

https://bit.ly/4ddOJXc

A primer on Rome's Eastern reach.

==========

==========

Dutch Nursing Home Offers Free Rent to College Students

In exchange for 30 hours of their time and companionship each month, local college students could live in the care center rent-free.

Image via Woon-en Zorgcentrum Humanitas Deventer / Facebook

"It started with the idea of becoming the warmest home for seniors in Deventer," Gea Sijpkes, director of WZC Humanitas, said in a statement. "And we wanted to do that with the energy of the youth."

For Sijpkes, it's a win-win. Recent studies find that intergenerational friendships can mitigate stress, lower depression, and boost self-esteem in older people.

The director went on to explain that "the students are not caregivers" but instead "good neighbors."

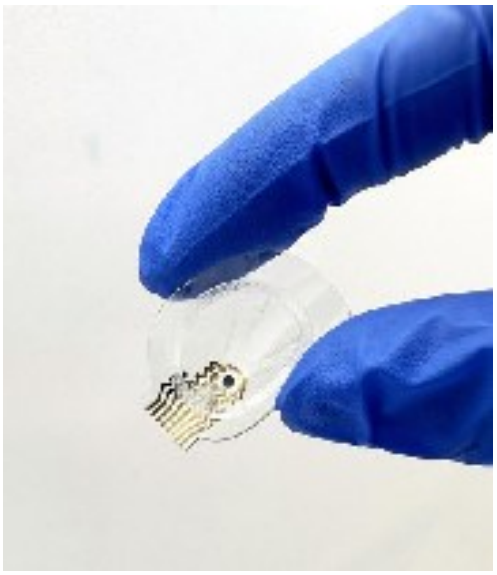
Although pool days, celebrations, and community dinners regularly bring all of the residents together organically, there are no strict rules when it comes to defining "volunteer hours."

https://bit.ly/4m8xsTj

==========

==========

Smart Bandage Monitors Chronic Wounds in Human Patients



An iCares smart bandage
Credit: Caltech

Caltech professor of medical engineering Wei Gao and his colleagues are envisioning a smart bandage of the future—a "lab on skin" that could not only help patients and caregivers monitor the status of chronic wounds but also deliver treatment and speed up the healing process for those cuts, incisions, scrapes, and burns that are slow to heal on their own.

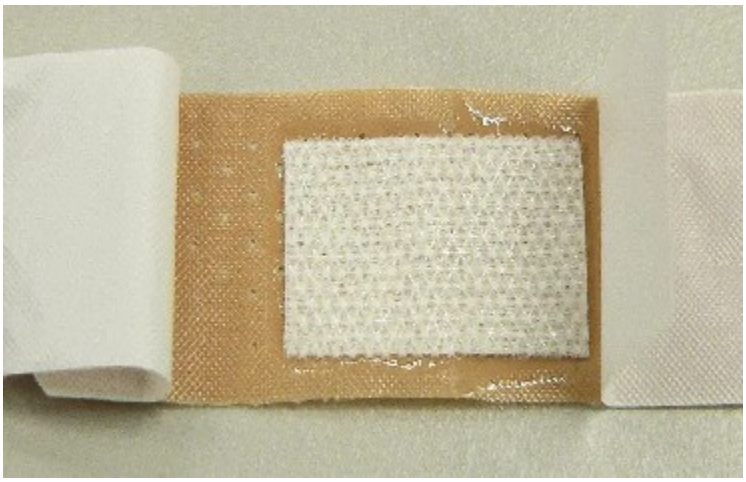
Now Gao and his colleagues from Caltech and the Keck School of Medicine of USC have cleared another hurdle by demonstrating that an improved version of their bandage, which they call iCares, was able to continually sample fluid, which the body sends to wound sites as part of the inflammatory response, in 20 human patients with chronic wounds. These wounds were not able to heal either because of diabetes or poor blood circulation; the researchers also studied additional patients before and after surgery.

https://bit.ly/3Shmi0A

==========

Smart 'Band-Aid' Delivers Medicines Wirelessly on Demand

Chinese researchers made a "band aid" for organs to improve drug delivery systems.



Rama

To solve an important problem in drug delivery, a research team that includes Beihang University and Peking University developed an electronic patch that acts like a band-aid for organs.

Traditional drug delivery systems send a vague package through the body that requires higher doses than necessary and might harm organs in the process of trying to find their destination. Large-molecule drugs, or biopharmaceuticals based on proteins, face an even greater challenge as the cell membrane often blocks these drugs, according to CGTN.

Aside from performing its function as a drug delivery system, the NanoFLUID also picked up on information about the disease. The approach identified DUS2 as a lung-specific metastasis driver.

https://bit.ly/450bueV

==========

==========

Autoland For Piston Aircraft... A Video

Garmin's Autoland for the latest Cirrus SR series features a first-of-its kind auto throttle for piston aircraft.

Screenshot/Aviation Consumer

Until now, Garmin's revolutionary autoland system has only been available for turboprops and jets and the market has been waiting for the first Garmin Emergency Autoland for piston-powered airplanes. Cirrus delivered the tech—six years later—in its latest SR G7+ series. This latest model in the Cirrus lineup has emergency autothrottle, new tech that can tame runway incursions, and IQ Pro—a smartphone app that takes the flying and ownership experience to a higher level in safety and automation. For owners with sights on moving into the Cirrus Vision Jet, the flight deck in the new SR G7 models mimics the jet cockpit.

https://bit.ly/43dC42Z

This is truly amazing tech for a fixed gear single. I recommend the video for all pilots.

==========

Carmakers Are Embracing Physical Buttons Again

Amazingly, reaction times using screens while driving are worse than being drunk or high—no wonder 90 percent of drivers hate using touchscreens in cars. Finally the auto industry is coming to its senses.

Courtesy of Hyundai/Rolls Royce

Driving is one of the most cerebrally challenging things humans manage regularly—yet in recent years manufacturers seem almost addicted to switch-free, touchscreen-laden cockpits that, while pleasing to those keen on minimalistic design, are devoid of physical feedback and thus demand visual interaction, sometimes at the precise moment when eyes should be fixed on the road.

A smattering of automakers are slowly admitting that some smart screens are dumb. Last month, Volkswagen design chief Andreas Mindt said that next-gen models from the German automaker would get physical buttons for volume, seat heating, fan controls, and hazard lights. This shift will apply "in every car that we make from now on," Mindt told British car magazine Autocar.

In-vehicle infotainment systems impair reaction times behind the wheel more than alcohol and narcotics use, according to researchers at independent British consultancy TRL. The five-year-old study, commissioned by road-safety charity IAM RoadSmart, discovered that the biggest negative impact on drivers' reactions to hazards came when using Apple CarPlay by touch. Reaction times were nearly five times worse than when a driver was at the drink-drive limit, and nearly three times worse than when high on cannabis.

https://bit.ly/4cXVBrm

Were it up to me, the only high tech auto gizmo would be cruise control.

==========

Rotisserie Chickens: How Come So Cheap?

saltsweetbitter.com

This video explains the economics.

https://youtu.be/0a-3U4CfD94?t=33

==========

A Novel Idea

elearning.masterprof.ro

Background

The novel is a literary form that features an extended, fictional prose narrative that typically runs at least 40,000 words. Fans of the novel argue that it is the epitome of literary expression because its unique form allows for empathy in a way that other genres and media do not.

Throughout its centuries-long history, the novel has responded to social issues, imagined faraway worlds, and even questioned its own usefulness. The form is still evolving in the 21st century by responding to the unique concerns of the present.

The First Novel(s)

Many consider the world's first novel to be "The Tale of Genji," an 11th-century text written by Murasaki Shikibu in Japanese vernacular. More than just a long-form piece of prose fiction, "The Tale of Genji" delves into its characters' psyches, allowing readers to access their interior lives. After reading an English translation in 1925, Virginia Woolf remarked that Shikibu captured "the intricacies of behavior, in what men said and women did not quite say."

Miguel de Cervantes' "Don Quixote," released in two parts in the early 17th century, is considered by some critics to be the first Western novel. Rather than relying on formulas and archetypes like popular medieval romance stories, which praised the chivalric code of the nobility, Cervantes' novel offered a complex main character, an unreliable narrator, and a psychological exploration of how literature itself informs perspective—features that would define the novel for centuries to follow.

Thanks to the rise of the printing press, these novels—along with other early examples—were easily reproduced and widely distributed to an increasingly literate public.

Evolution of the Form

The novel's popularity surged in the 19th century, especially in England, where circulating libraries made books more accessible. Women, in particular, flocked to reading novels, drawn to early feminist titles by writers like Jane Austen, Charlotte and Emily Brontë, and George Eliot.

At the same time, other writers were using the form of the novel for stories that were decidedly unrealistic. Among the most influential was Mary Shelley's "Frankenstein," which Twentieth-century modernist novelists—like Woolf, James Joyce, and William Faulkner—sought to recreate the experience of the human mind by experimenting with stream-of-consciousness narration and nonlinear narratives.

In the postmodern era that followed World War II, writers like Ngũgĩ wa Thiong'o, Gabriel García Márquez, and Toni Morrison challenged the form itself, with metafictional novels that interrogated authorial intent, experimented with multiple genres, and criticized the ways storytelling was often weaponized by the powerful.

Countless 21st-century novelists have explored the internet's impact on language and communication, with many turning to autofiction that reflects the experience of social media.

A Supposed Death

Though once considered the pinnacle of literary expression, the novel is no longer a popular art form. Reading rates have reached historic lows, with only 17% of American adults polled in 2022 saying they read a book in the previous year. Some suggest that newer, more immersive media—including film, TV, and podcasts—have subsumed the novel's traits and, in the process, captured its readers.

Still, the novel's acolytes suggest that it stands alone, offering a singular experience that builds empathy and uniquely captures the experience of being alive.

==========

What the Most Essential Terms in AI Really Mean

A simple primer to the 19 most important concepts in artificial intelligence.

Irene Pérez for Quanta Magazine

Artificial Intelligence moves fast, so the first step in understanding it—and it's role in science—is to know the lingo. From basic concepts like "neural networks" to more contested terms like "reasoning," here are 19 key ideas from the world of modern AI.

https://bit.ly/3GBwPBg

If you're interested in AI, you may want to tuck this little jewel somewhere you can find it.

==========

Every Day Smiles:

- My wife wants me to wear a bracelet that belonged to her grandfather. It says "Do Not Resuscitate."
- It's been months since I bought the book, How To Scam People On Line. It still hasn't arrived yet.
- If you have a red wine stain on your carpet, get some white wine and drink it until you don't care anymore.
- One good thing about being wrong is the joy it brings to others.
- Even rarer than a doctor who can't stand the sight of blood is a lawyer who can't stand the sight of money.
- My wife and I decided to never go to bed angry. We've been awake since Tuesday. .
- Being old is when you don't care where your spouse goes, just as long as you don't have to go too.

- At a wedding reception, someone yelled: "All married people, please stand next to the one person that has made your life worth living." The bartender was almost crushed to death.
- I met my wife at a singles night. I was surprised because I thought she was home with the kids.
- I want someone I can share my entire life with who will leave me alone most of the time.

==========

Autism Rates Rose Again. Experts Explain Why

Autism is more common than ever before, a new report suggests.

More children than ever before were diagnosed with autism in 2022, a new report shows. Experts say most of the rise is because of better detection and increased awareness of the developmental condition.
Maskot/digitalvision/getty images plus

As of 2022, about 1 in 31 children in the United States were diagnosed with autism by the time they were 8 years old, researchers reported online April 15 in the Centers for Disease Control and Prevention's Morbidity and Mortality Weekly Report. Previous studies had put the number at 1 in 36 in 2020 and 1 in 150 in 2000.

"The thing I think that everyone can state, without question or controversy, is that the work really does highlight how unbelievably common autism now is across communities in the U.S.," says Zachary Warren, a clinical psychologist at Vanderbilt University Medical Center in Nashville and a coauthor of the study. "I think we should be doubling our commitment towards finding answers and for building better services."

https://bit.ly/4jSIs59

==========

The 51 Most Beautiful Places in the U.S.

From stunning desert scenery to gorgeous beaches, these are the most scenic spots in every state.

Alaska: Wrangell-St. Elias National Park and Preserve
Cappan / Getty Images

The U.S. is full of beautiful, diverse landscapes that range from desert mesas and wooded river valleys to barrier islands and lush, steamy tropics. The scenery along Florida's palm-studded coast is much different than what you would see in California's rugged Sierra Nevadas, for instance, or the fiery canyonlands of the Southwest.

To help inspire your next trip, we put together a list of the most beautiful places in every state—plus the District of Columbia.

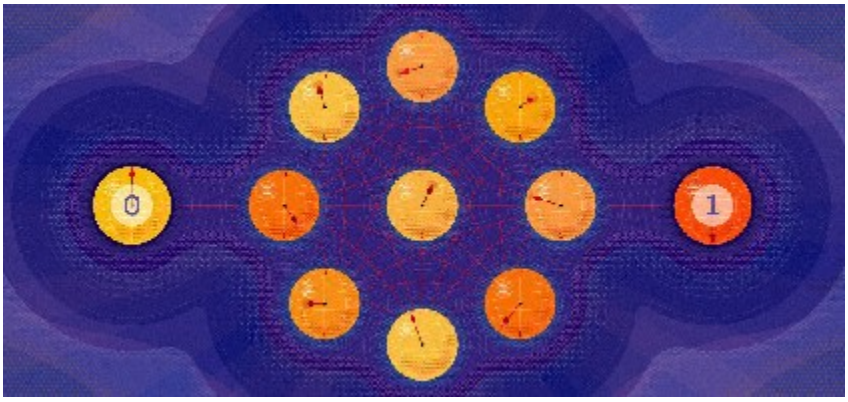
https://bit.ly/4i8gNfg

==========

==========

What Will It Take To Build Good Qubits?

Each week Quanta Magazine explains one of the most important ideas driving modern research. This week, physics staff writer Charlie Wood looks at recent high-profile news in the world of quantum computing.



Quanta Magazine

Capable quantum computers would rewrite our understanding of electrons, atoms and other quantum particles, which behave in complicated ways that are tough for standard "classical" computers to simulate. As Richard Feynman memorably put it, "Nature isn't classical, dammit, and if you want to make a simulation of nature, you'd better make it quantum mechanical." Quantum computers might also be able to solve wider classes of problems that are hard for classical counterparts. All that's missing is the quantum hardware to run it on.

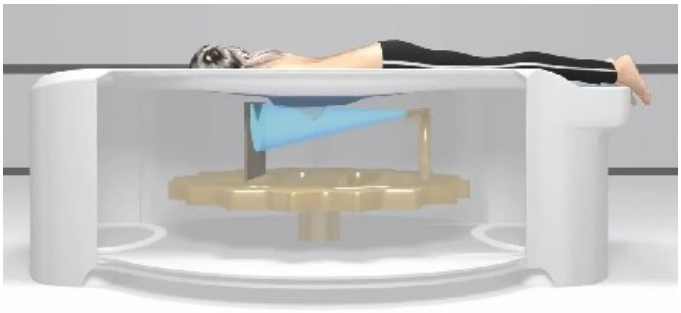
Researchers are working hard to develop those machines, with Google, IBM, Microsoft and other institutions devoting billions of dollars to the enterprise. But the devices built so far are still only proof-of-concept science experiments. Each group is chipping away at the same colossal challenge: to marshal thousands of reliable "qubits" — the objects that power quantum computations.

https://www.linkedin.com/pulse/what-take-build-good-qubits-quanta-magazine-wtdje/

==========

==========

New Device Enables More Accurate Breast Cancer Detection



Koning Health

Developed by Georgia-based imaging technology company Koning Health, the Koning Vera Breast CT produces high-resolution, 3D photos in seven seconds and doesn't compress the breasts the way a mammogram does — making for a more comfortable patient experience and allowing providers to identify tumors with greater accuracy.

The device is particularly helpful in detecting and diagnosing cancer in women with dense breast tissue. Having dense breasts modestly increases one's likelihood of developing breast cancer, and also makes it harder to spot the disease via traditional mammograms.

This July, the Breast CT was installed at the Bedford Breast Center in Beverly Hills, California, and in April, it made its New York City debut at Community Radiology NY in Manhattan. It's also currently available for clinical use in Arkansas, Alabama, Georgia, Tennessee, and in parts of Europe and Asia, with installations planned for Texas, Illinois, Florida, and Ohio in the coming months. Use this interactive map to find a location.

https://bit.ly/3ZeaWOY

Anyone familiar with the device?

==========

Study Points to a Bright Future for Food Allergy Treatment

alvarez/ iStock

In a landmark U.K. trial, two-thirds of participating adults with a severe peanut allergy were desensitized thanks to oral immunotherapy. While oral immunotherapy has previously been successful in infants and children, this is the first study to provide evidence that adults can also benefit from the medical treatment — and it nods to a bright future for treating food allergies more broadly.

"Up until 15 years ago we never offered anything other than complete avoidance and carry your epinephrine," Robert Wood, the director of pediatric allergy and immunology at Johns Hopkins University, told The Guardian. "Now we have options."

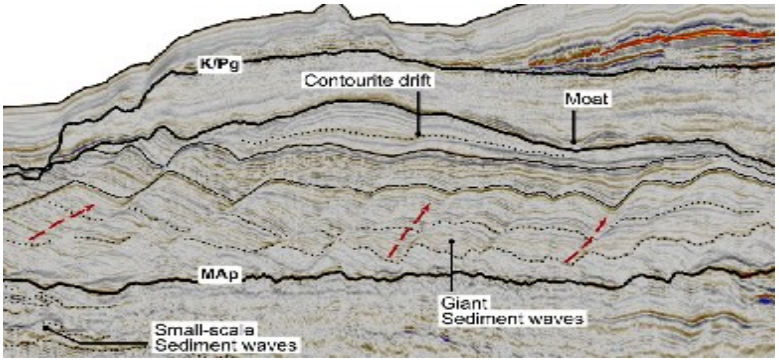
These new options come at a vital time, as food allergies have surged at unprecedented levels around the world and can take a profound toll. "Living with peanut allergy is a huge burden due to the need for constant vigilance and the risk of accidental exposures," lead study author Hannah Hunter said in a statement. "Everyday situations such as eating in restaurants and social events are anxiety provoking and our patients tell us that the condition also affects travel choices and career options."

For Chris Brookes-Smith, one of the trial participants, the results are nothing short of life-altering. "All of my life I had associated the taste and smell of peanuts with fear and death," he said, adding: "Before, a tiny mistake could have life-threatening impacts but now I don't have the fear that I might collapse and die from eating a takeaway."

==========

Gigantic 'Mud Waves' Buried Deep Beneath the Ocean Floor Reveal Dramatic Formation of Atlantic

Enormous "mud waves" buried under the Atlantic seabed formed 117 million years ago as the Atlantic Ocean opened up.



The "mud waves" discovered off the coast of Africa, under the Atlantic Ocean, are hundreds of feet high and almost a mile long.
(Image credit: courtesy of D Duarte et al/Heriot-Watt University)

The discovery of buried "mud waves" off the coast of western Africa reveals that the Atlantic Ocean was born at least 4 million years earlier than scientists previously thought.

These waves, each hundreds of feet high and over half a mile (1 kilometer) long, were caused by the mixing of extremely salty water from the southern hemisphere with less-salty water from the northern hemisphere as South America and Africa tore apart 117 million years ago, forming the Atlantic, according to new research published in the June issue of the journal Global and Planetary Change.

Previously, the Atlantic was thought to have finished opening between 113 million and perhaps 72 million years ago.

https://bit.ly/3YM03nq

==========

The Most Extreme 'Rogue Wave' on Record

In November of 2020, a freak wave came out of the blue, lifting a lonesome buoy off the coast of British Columbia 17.6 meters high (58 feet)

Large wave in Nazaré, Portugal, where the record was set for the biggest wave ever surfed in 2017. (Alexander Ehlers/Getty Images Plus)

In November of 2020, a freak wave came out of the blue, lifting a lonesome buoy off the coast of British Columbia 17.6 meters high (58 feet).

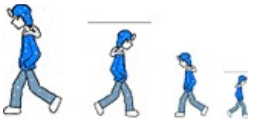
The four-story wall of water was finally confirmed a couple of years later as the most extreme rogue wave ever recorded.

Such an exceptional event is thought to occur only once every 1,300 years. And unless the buoy had been taken for a ride, we might never have known it even happened.

https://bit.ly/4iEslY5

==========

My Walking Thoughts



For Sunday May 25 2025

==========

Memorial Day 1945

The war in Europe was finished, but the fate of our forces on Okinawa was still in doubt… a reminder of which came by telegram from one of my father's brothers telling of the death of Major Thomas Trotti during an artillery barrage. His death was particularly poignant to me because he had lived with us for those precious last days prior to his deployment overseas, and on his departure had given me a pair of globe and anchor collar pins.

During the week prior to that Memorial Day, my brother, sister, and I spent our evenings helping mom make little red, white, and blue ribbon markers that on the appointed day we placed on graves at the nearby Sawtelle Veterans Cemetery. We had done this in the past, but this was the first time its significance became clear to me. There were soldiers and sailors and Marines in foreign lands, whose hopes and dreams like Tom's had been dashed in an instant, and while it seemed puny by comparison, it was our job to remember them.

I wore those collar ornaments during my time in the Corps and gave them to the son of a family friend. To my regret I know not of his or their fate, but I hope those little ornaments adorn the uniform of some Marine on duty somewhere on this Memorial Day.