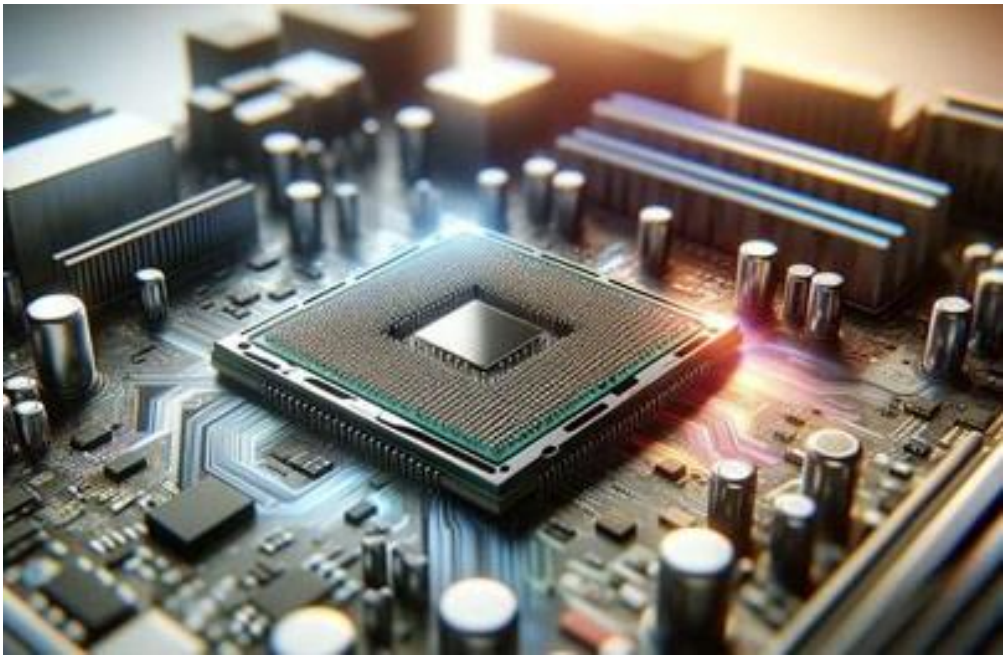
QUANTUM COMPUTING



bussinfeed.com

What Makes Quantum Computing So Hard to Explain?

theinnerdetail.com

To understand what quantum computers can do — and what they can't — avoid falling for overly simple explanations.

https://bit.ly/3DkSucl

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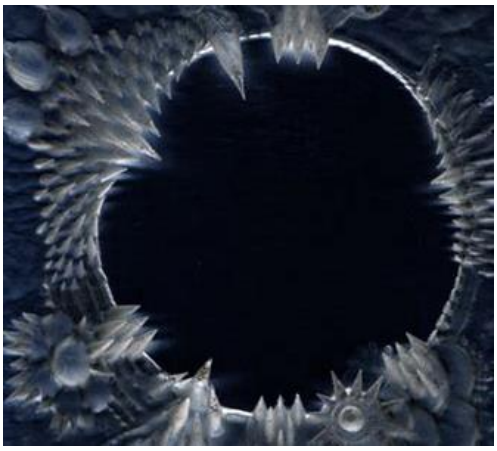
The Quantum Phantom



deviantart.com

A ghostly quasiparticle rooted in a century-old Italian mystery could unlock quantum computing’s potential—if only it could be pinned down

https://bit.ly/3MaiwDd

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Quantum Supremacy: A Three Minute Guide

Google says they have reached 'quantum supremacy' with their quantum computer 'Sycamore'. What this means, why IBM disagree, and the significance for quantum computing.

https://www.nature.com/articles/d41586-019-03410-w

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Quantum Computing Decrypted

Nearly three decades ago, a new method for encrypting digital information transformed online security. Dubbed RSA↓, it exploited a mathematical conundrum: It is devilishly difficult to take an extremely large number and figure out its prime number factors↓.

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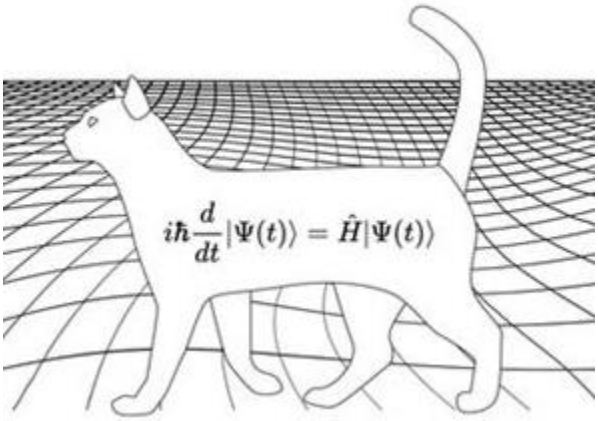
Schrödinger's Cat: A Thought Experiment in Quantum Mechanics



shutterstock

Austrian physicist Erwin Schrödinger, one of the founders of quantum mechanics, posed this famous question: If you put a cat in a sealed box with a device that has a 50% chance of killing the cat in the next hour, what will be the state of the cat when that time is up? Chad Orzel investigates this thought experiment.

https://youtu.be/UjaAxUO6-Uw

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Exploring the IBM Quantum Lab with Dr. Olivia Lanes

Dickinson.edu

A thorough tour of an IBM Quantum lab and data center. See exactly where qubits live inside a 15 mK cryostat and how we can take data and communicate with our quantum computers.

A typical quantum lab showcases the major cryogenic and room temperature components needed to work with a quantum computer. See exactly where qubits live

inside a 15 mK cryostat, learn about all the parts inside the fridge, and get closer to quantum technology

https://youtu.be/4gpPHWCoWPs

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Quantum Computing Is Taking on Its Biggest Challenge: Noise

cic.vc

For a while researchers thought they'd have to make do with noisy, error-prone systems, at least in the near term. That's starting to change.

https://bit.ly/46RzHTD

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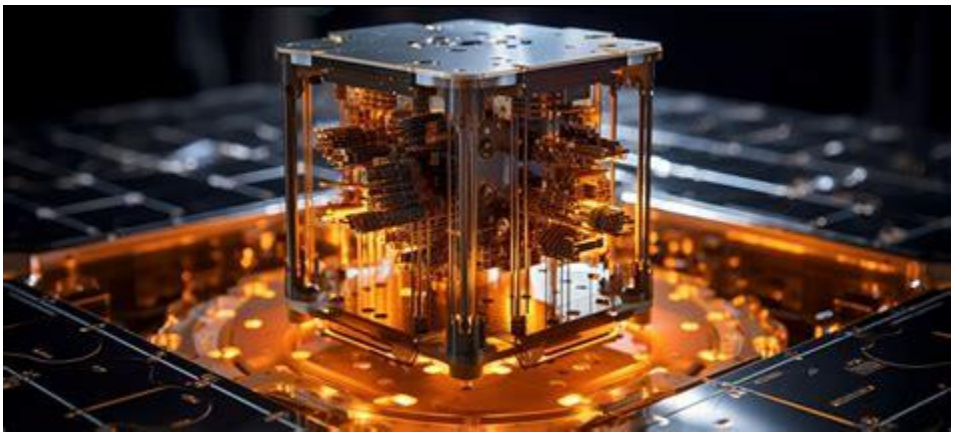
Potential and Challenges of Quantum Computing Hardware Tech



enoz.com

Many qubit technologies could shape the future of quantum computing hardware. Here, we take a closer look at five of the major qubit technologies.

https://bit.ly/46UlxB7

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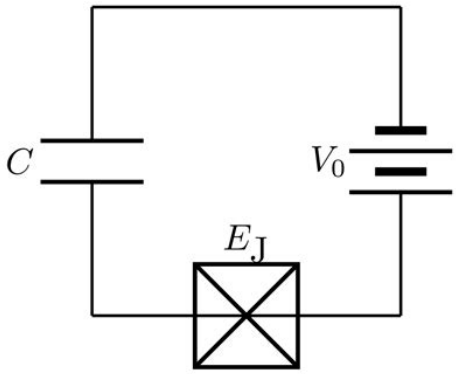
How the First Superconducting Qubit Changed Quantum Computing



laptrinhx.com

The qubits that power today's quantum computers come in many different forms. Some quantum processors use photonic qubits, which are made up of single photons of light. Others are based on trapped-ion qubits, which store and process information using charged atoms suspended in an electromagnetic field.

Among the most mature architectures is the superconducting qubit. This is a fact that many of us in the quantum community take for granted today, but for the researchers operating at the dawn of quantum computing in the mid-to-late 1990s, it might have come as quite a surprise.

https://bit.ly/3X5z4Tf

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Quantum and Classical Data in the Same Fiber-Optic Connection

(Image credit: Xuanyu Han via Getty Images)

Scientists have transmitted quantum and conventional internet data through the same fiber-optic channel, meaning a future quantum internet could theoretically use existing infrastructure. This new "hybrid" network could pave the way for more efficient implementation of quantum communications by enabling quantum and conventional data to share the same infrastructure. The researchers revealed their findings in a study published July 26 in the journal Science Advances.

https://bit.ly/3AxlyiB

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