

# THE QUANTUM QUARTERLY

## Q1 2021

Welcome to the Quantum  
Quarterly Review.

Here we cover the biggest  
commercial news in the  
Quantum Computing industry  
over the last 3 months.

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THE QUANTUM QUARTERLY

# Q1 2021 IN BRIEF

There was some debate whether the momentum behind 2020's quantum technology and quantum computing breakout would continue into Q1 of 2021. Many expected at least a pause for a collective breath catching.

But, if anything, the pace of funding and research findings picked up.

Many of the QC headlines were somewhat expected -- several quantum startups reported new -- and significant -- investment rounds. Countries and regions also boosted startups with governmental funding and organizational moves to concentrate research and development.

The striking difference in the news for Q1 is reports that quantum startups may be considering alternative ways to seek funding -- and even alternative ways to go public. We'll review some of those confirmed -- and unconfirmed -- stories in this quarterly report.



***Click this icon throughout this pres to see the full stories behind the brief***



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- About TQD



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# THE BIG NEWS



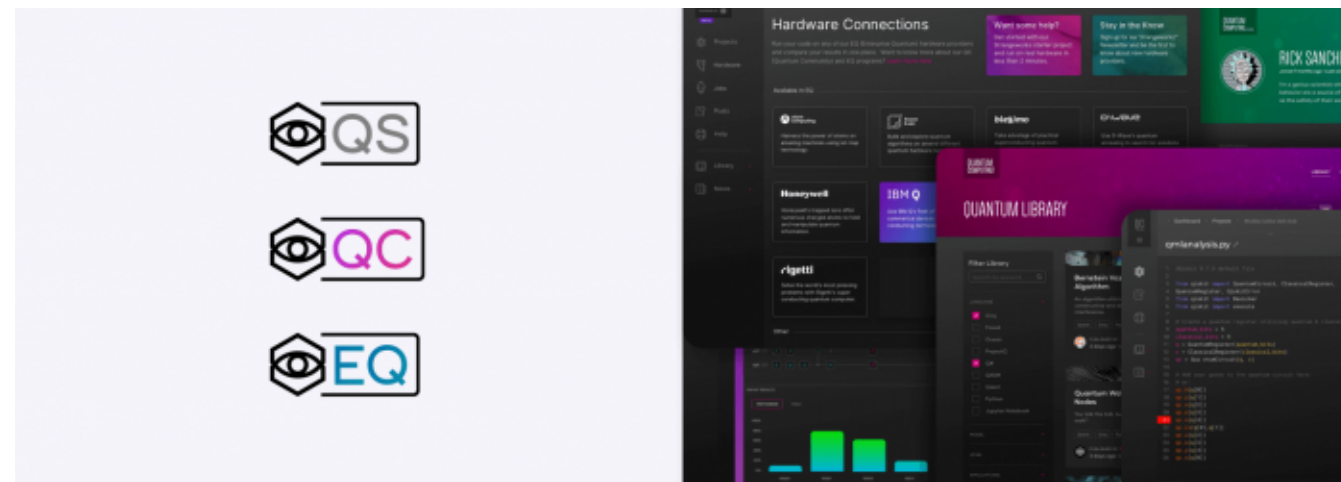
## QUANTUM SPAQ



IonQ Is First Pure-Play Quantum Public Company  
Bloomberg reported that Maryland-based IonQ was in talks to merge with a special purpose acquisition company, or SPAC, DMY Technology Group Inc. (NYSE:DMYI). SPACs have become an increasingly popular way to take companies public and avoid the lengthy IPO process. If the rumor pans out, IonQ, which is attempting to build a general purpose ion-trap quantum computer, may be the first pure-play quantum computer builder to go public.



# STRANGeworks REVEALS QUANTUM PRODUCTS IN THE WORKS



Strangeworks Launches Quantum Ecosystem to Humanize Quantum Technologies

Strangeworks, Inc. has officially launched its quantum ecosystem geared toward “humanizing quantum.” The complete quantum ecosystem includes a browser-based development environment, hardware, software, educational resources and a quantum code library. The offerings include: Strangeworks QS (Quantum Syndicate), Strangeworks QC (Quantum Computing) and Strangeworks EQ (Enterprise Quantum).



## CHINA'S QUANTUM STARTUP ENVIRONMENT HEATS UP



China Quantum Startup Reveals \$7.8 M Angel Round  
Quantum communication startup Qike Quantum received 50 million yuan, or about \$7.8 million in an Angel financing round.

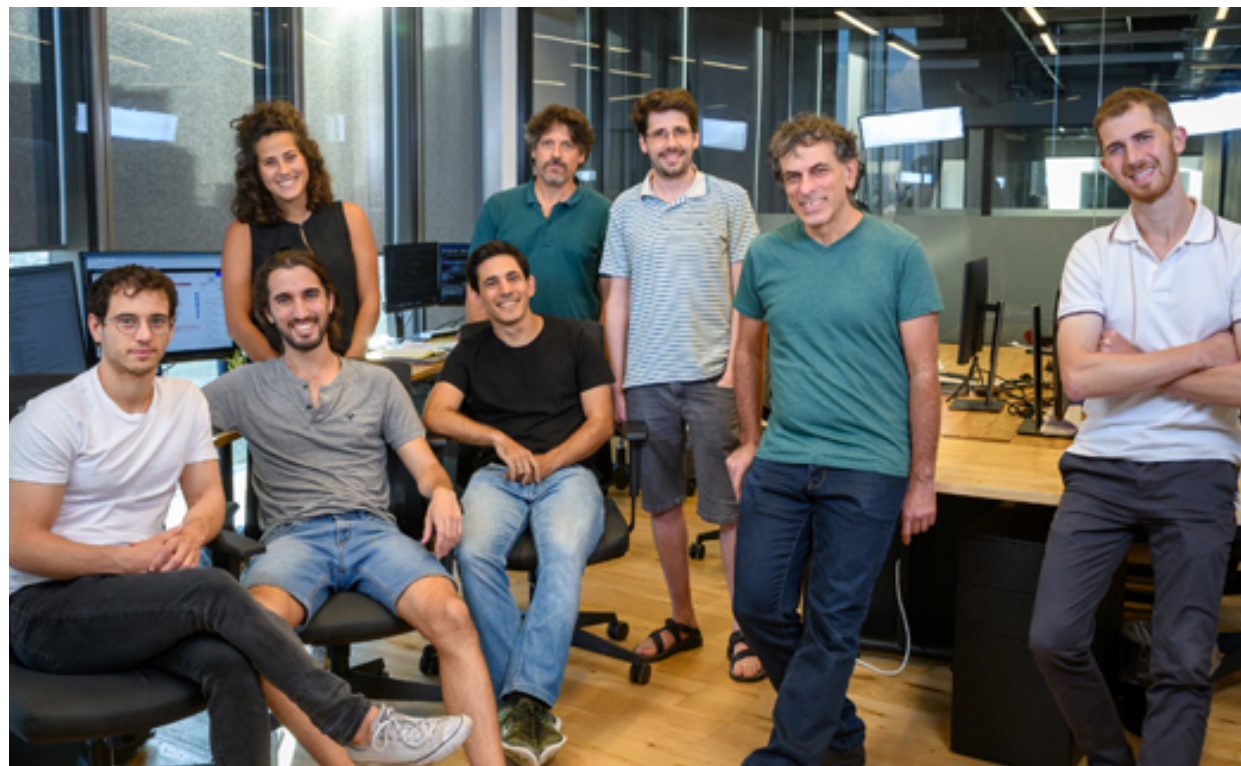
According to Chinese media sources, funds will be used for R&Dt and mass production of new generation of miniaturized quantum communication equipment. The company also plans further research into an ion trap quantum computer.

Investors include Zhongguancun Development Frontier Fund and Zhongguancun Gold Seed Fund.





## ISRAEL-BASED QUANTUM STARTUP GETS \$10.5 MILLION BOOST



### Classiq Adds More Funding

Classiq secured \$14.5 million in funding. The \$10.5 million Series A financing round was led by Team8 and Wing Venture Capital, with additional participation from Entrée Capital, OurCrowd and IN Venture, the corporate venture arm of Sumitomo Corporation in Israel, and follows a \$4 million seed financing round from Entrée Capital



## **\$20 MILLION IN SERIES A FUNDING FLOATS RIVERLANE'S WAY**



Riverlane Secures \$20 million in Series A Funding  
Riverlane has raised \$20 million in Series A funding to build Deltaflow, its operating system for quantum computers, according to a company statement. The round was led by European technology venture capital fund Draper Esprit, and supported by existing investors, Cambridge Innovation Capital, Amadeus Capital Partners, and the University of Cambridge. The company reported it signed up 20% of the world's quantum hardware manufacturers to use Deltaflow and will use the funding to expand internationally to the US, Europe and beyond.





# CQC OFFERS FREE TKET TO QUANTUM COMPUTING COMMUNITY



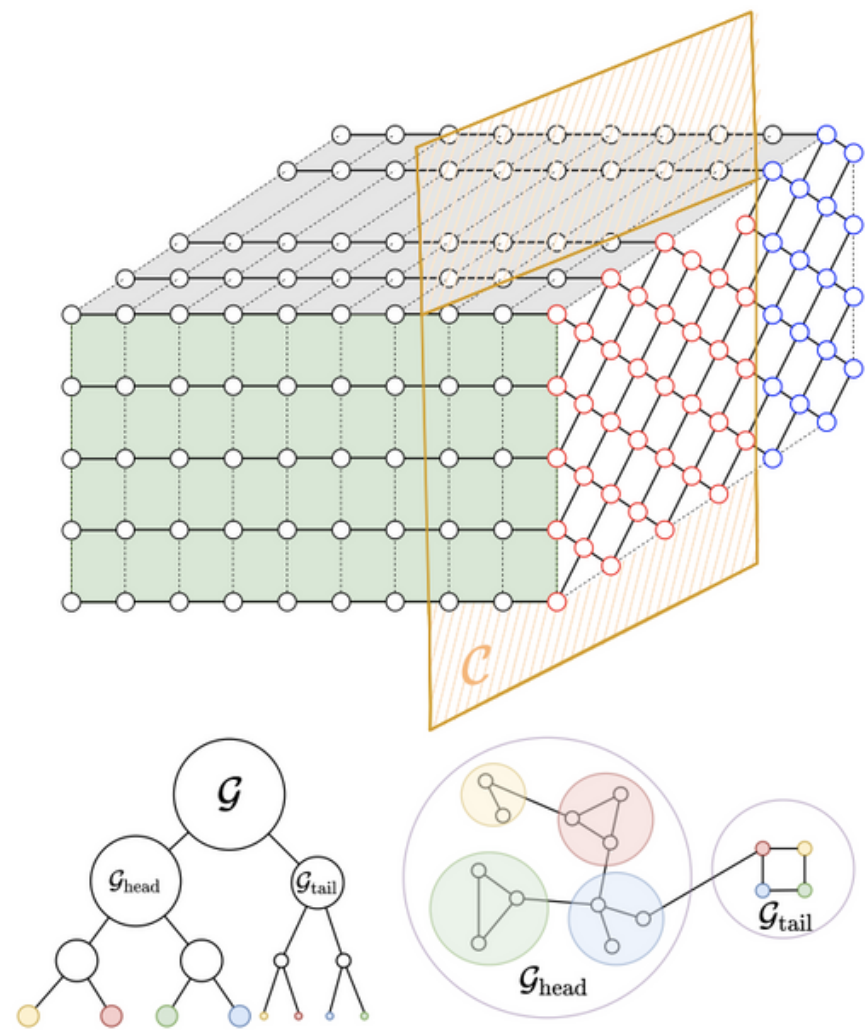
tket To Ride

Cambridge Quantum Computing (CQC) recently announced the company's latest version of tket — pronounced "ticket" — will have all license restrictions removed for use of tket's Python module, also known as pytket.

Ilyas Khan, CQC's CEO, said that allowing free access to CQC's latest version of its high-performance quantum software development kit — or, SDK — is one of the pioneering quantum computing firm's most important decisions.



# RESEARCH: SUPREMACY CLAIM CHALLENGED



Scientists Say They Used Classical Computers to Outperform Google's Sycamore QC

A pair of Chinese scientists say they used a general tensor network method in an experiment that outperformed the sampling task performed by the Google's Sycamore quantum computer, which led to the company's announcement of quantum supremacy in 2019.





## RESEARCH: ISRAEL TO INVEST IN COUNTRY'S OWN QUANTUM COMPUTER



Israel Invests \$60 Million to Build Its Own Quantum Computer

Israel will join the global effort to build a quantum. The country's Ministry of Defense and Innovation Authority is spending a \$60 million — or 198 million-shekel — project to build a 30- to 40-qubit quantum computer.

The authority will be taking bids from multinational companies, Israeli businesses and universities.



## QUANTUM RESEARCHERS ARE ENGAGED WITH DIAMONDS

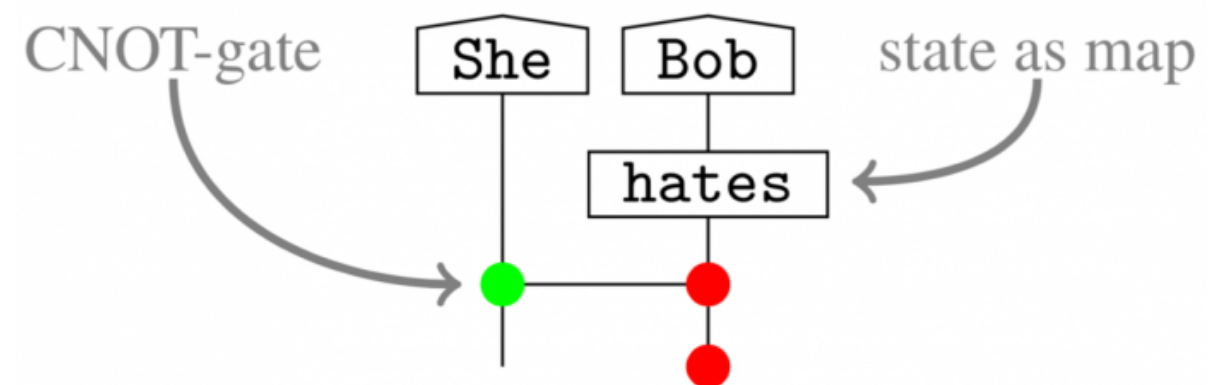


Research: Scientists Develop Hybrid Quantum System Based On Diamonds

Researchers propose a practical approach using the response of a small magnetic disk, to couple different diamond defects over distances 1,000 times greater than typical coupling lengths. The team projects coupling defects in the atomic positioning of diamonds to small magnets will give rise to quantum bits, otherwise known as qubits, which can manipulate information much better than classical computer bits.



## TALKING QUANTUM COMPUTERS...



Research: Scientists Report Largest Ever QNLP Implementation A team of Cambridge Quantum Computing (CQC) researchers report that they have taken another step toward using quantum computers to create meaning aware computers using natural language processing — or NLP. In a study, the team demonstrated the largest ever experimental implementation of Natural Language Processing (NLP) tasks on a quantum computer.



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# CAPITAL MARKETS



**>\$0.7BN**

of new private capital flowing into  
Quantum Technology companies in Q1

21

**\$2BN**

Implied pro forma market cap of IonQ  
at acquisition




# FUNDRAISES IN THE QUARTER

Extracts from  
The Quantum  
Insider

Logos ↑↓	Companies ↑↓	Latest Funding Date ↑↓	Country ↑↓	Total Disclosed Funding (USD) ↑↓	More Info ↑↓
	D-Wave Systems	March 11, 2021	Canada	40,000,000	<a href="#">More Info</a>
	IonQ	March 8, 2021	United States	650,000,000	<a href="#">More Info</a>
	Classiq	Jan. 27, 2021	Israel	10,500,000	<a href="#">More Info</a>
	Riverlane	Jan. 25, 2021	United Kingdom	20,000,000	<a href="#">More Info</a>
	QUDOOR	Jan. 19, 2021	China	7,752,659	<a href="#">More Info</a>
	Origin Quantum	Jan. 15, 2021	China	15,434,480	<a href="#">More Info</a>
	Quantum Xchange	Jan. 7, 2021	United States	13,500,000	<a href="#">More Info</a>



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ABOUT TQD

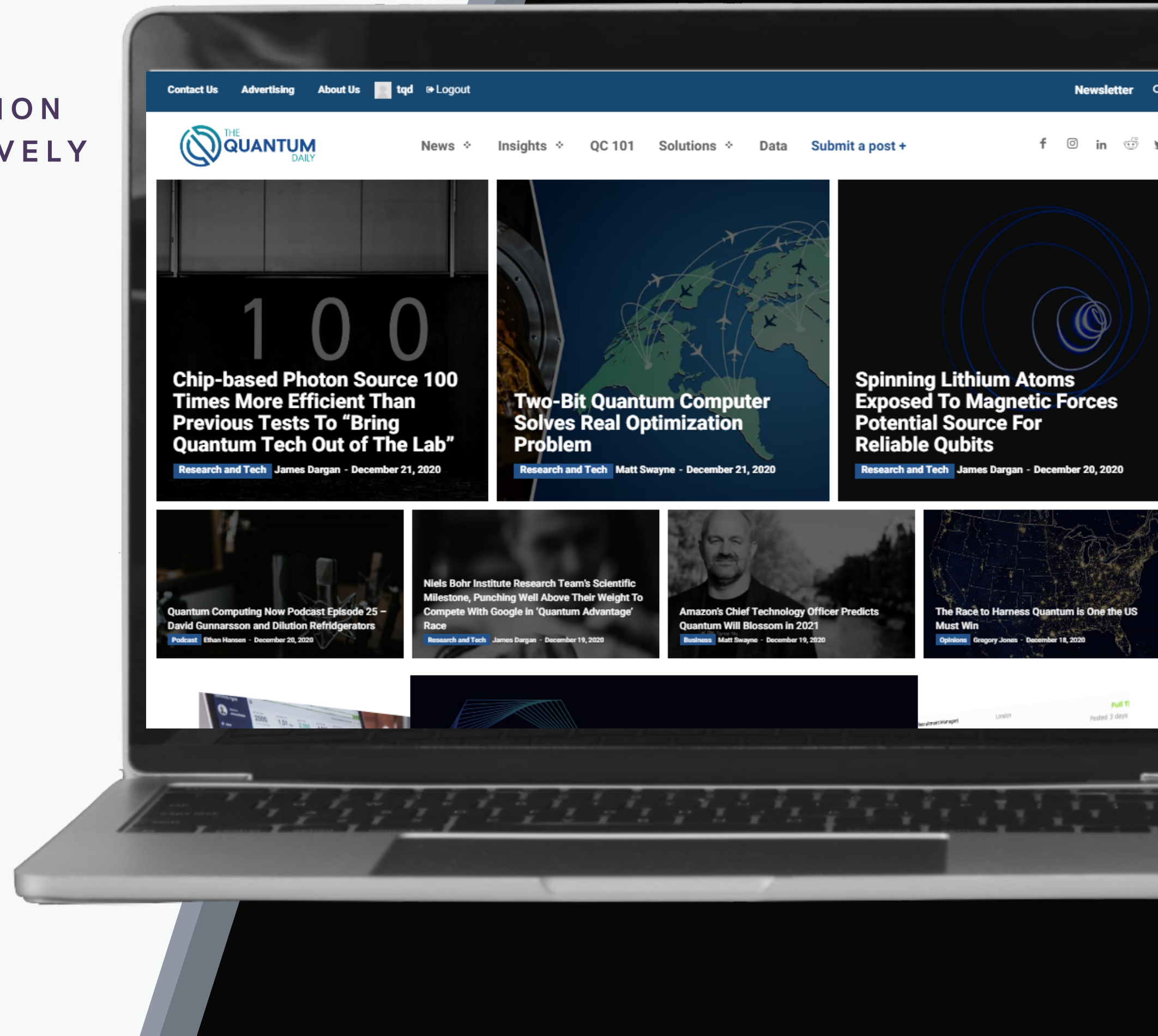


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DAILY

# THE QUANTUM DAILY

IS THE WORLD'S FIRST DIGITAL INFORMATION AND DATA PLATFORM DEDICATED EXCLUSIVELY TO QUANTUM COMPUTING

- Leading provider of content and information on the Quantum Computing industry
- Focus on the commercial applications of the technology
- News, analysis, exclusive interviews, long-form reviews and data (see next page)





# THE QUANTUM INSIDER - DATA

PRICE UPON REQUEST

- For Advertisers: Appear on our industry leading dataset being used daily by our community.
- For Companies: Map your market and competitors.
- For Investors: Complete industry map with key insights and subsectors profiling the various QC stakeholders and their technological developments all the way to capital market players and the investments they make.

The screenshot displays the website for 'The Quantum Insider'. The top navigation bar includes links for Home, About, Access, Services, Contact, and a Login button. The main header features the text 'The Quantum Data Platform' and 'The leading provider of information, data and insights on Quantum Technologies.' alongside a stylized geometric logo and the text 'THE QUANTUM INSIDER'. Below this, it says 'POWERED BY' with a logo. The 'ABOUT' section is visible, describing the platform's data collection and its utility for investors and corporations. A 'Learn More' button is present at the bottom of the about section.

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### ABOUT

The Quantum Insider collects data world wide on quantum technologies and codifies it into a user friendly platform.

- ✔ Detailed data points on companies, investors, groups and more.
- ✔ Custom taxonomy and unique descriptions.
- ✔ Summary statistics.
- ✔ Proprietary linked data from The Quantum Daily interviews.

The Quantum Insider helps investors, corporations, startups, accelerators, policy-makers and governments to understand the current state of world affairs in quantum technologies.

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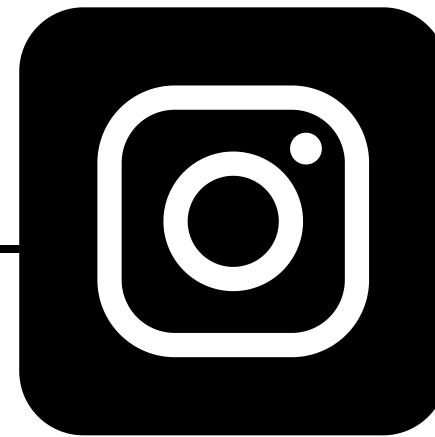
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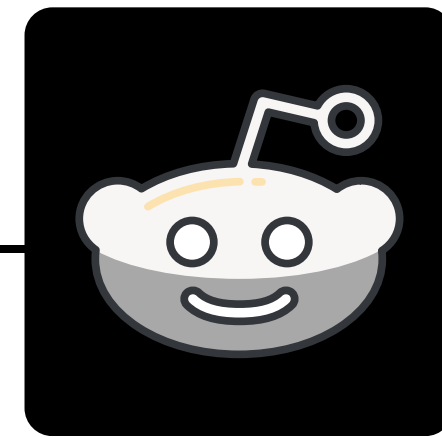
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