

Date: 02 Apr 2025

FYI - Fusion News/Alerts

Sector module #7 finalized - Today's achievement, tomorrow's "routine"

<https://www.iter.org/node/20687/todays-achievement-tomorrows-routine>

[Latest ITER Newline: <https://www.iter.org/whatsnew/453>]

Stellarators, once fusion's dark horse, hit their stride

<https://www.science.org/content/article/stellarators-fusions-dark-horse-hit-stride>

[Related] Type One publishes design basis for its stellarator fusion pilot plant

<https://www.ans.org/news/article-6903/type-one-publishes-design-basis-for-its-stellarator-fusion-pilot-plant/>

Europe's eight cryopumps are ready for ITER

<https://fusionforenergy.europa.eu/news/europe-delivers-eight-iter-cryopumps/>

Precision Measurement Systems for Fusion Research

<https://www.fraunhofer.de/en/press/research-news/2025/april-2025/precision-measurement-systems-for-fusion-research.html>

On the path to tokamak burning plasma operation

<https://euro-fusion.org/eurofusion-news/on-the-path-to-tokamak-burning-plasma-operation/>

Can We Bottle a Star? Breakthrough Fusion Device Could Hold the Key

<https://scitechdaily.com/can-we-bottle-a-star-breakthrough-fusion-device-could-hold-the-key/>

Paving the Way to Fusion Energy

<https://business.columbia.edu/insights/climate/future-of-fusion-energy>

FIA Calls for Targeted Support for Fusion Startups in the EU Startup and Scaleup Strategy

<https://www.fusionindustryassociation.org/fia-calls-for-targeted-support-for-fusion-startups-in-the-eu-startup-and-scaleup-strategy/>

Simulations showed that six valves provided the ideal setup for rapidly dispersing cooling gas

<https://www.pppl.gov/news/2025/simulations-showed-six-valves-provided-ideal-setup-rapidly-dispersing-cooling-gas>

Marvel Fusion extends Series B funding by €50m

<https://www.powerengineeringint.com/nuclear/marvel-fusion-extends-series-b-funding-by-e50m/>

CERN releases detailed plans for supercollider — but no hints about funding

<https://www.nature.com/articles/d41586-025-01018-x>

Lab scientists are using AI to guide the design of criticality experiments.

<https://www.lanl.gov/media/publications/1663/0125-nuclear-data-simulations>

Recent Peer-Reviewed Articles of Interest

Data-driven picosecond X-ray imaging for quantitative plasma-induced shock characterization

<https://www.nature.com/articles/s42005-025-02021-4>

Computational methods for focused arbitrary laser fields in plasma simulations

<https://pubs.aip.org/aip/pop/article/32/4/043901/3341862/Computational-methods-for-focused-arbitrary-laser>

Plasma channel guides electrons to 10 GeV

<https://pubs.aip.org/physicstoday/article/78/4/10/3340759/Plasma-channel-guides-electrons-to-10>

Application of virtual fitting in the manufacturing of the ITER European vacuum vessel sectors

<https://www.sciencedirect.com/science/article/pii/S092037962500198X>

Quantum mechanics goes boom

<https://pubs.aip.org/aapt/pte/article/63/4/292/3340816/Quantum-mechanics-goes-boom>

[Of Interest]

International scientists rethink U.S. conference attendance

<https://www.science.org/content/article/international-scientists-rethink-us-conference-attendance>

Six roadblocks to net zero — and how to get around them

<https://www.nature.com/articles/d41586-025-00935-1>