## **FYI - FUSION NEWS/ALERTS**

Date: 25 Feb 2025

#### **FYI - Fusion News/Alerts**

#### Have you ever wondered what it's like inside an operating tokamak?

https://www.iter.org/node/20687/have-you-ever-wondered-what-its-inside-operating-tokamak

[Latest ITER Newsline: https://www.iter.org/whatsnew/449]

#### New fusion plasma record set in France with new promise for fusion

https://www.powerengineeringint.com/nuclear/new-fusion-plasma-record-set-in-france-with-new-promise-for-fusion/

## The Commission of Experts on Nuclear Fusion presents its final report with the participation of Prof. Gerd Leuchs

https://mpl.mpg.de/news/article/kernfusion

#### **Showing How Plasma Electrons Can Enhance Fusion Reaction Rates**

https://lasers.llnl.gov/news/showing-how-plasma-electrons-can-enhance-fusion-reaction-rates

#### Plasma arc cutting: Scientists decode gas flow dynamics

https://phys.org/news/2025-02-plasma-arc-scientists-decode-gas.html

## Colliding plasma ejections from the sun generate huge geomagnetic storms

https://phys.org/news/2025-02-colliding-plasma-ejections-sun-generate.html

#### **EUROfusion's Fusion in Europe Newsletter, February 24, 2025**

https://euro-fusion.org/wp-content/uploads/2025/02/fie-issue-2005-1.pdf

# Last Energy Secures UK Nuclear Licensing Milestone for South Wales SMR Project

https://www.powermag.com/last-energy-secures-uk-nuclear-licensing-milestone-for-south-wales-smr-project/

#### Momentum tunnelling across quantum barriers

https://www.nature.com/articles/s41565-025-01868-6

#### **Revolutionizing Space: The 30-Day Voyage to Mars**

https://www.scimag.news/news-en/129142/revolutionizing-space-the-30-day-voyage-to-mars/

#### The Cosmic Quest for Gold: A Journey Through the Universe

https://www.scimag.news/news-en/130855/the-cosmic-quest-for-gold-a-journey-through-the-universe/

#### Russia Planning to Build More Nuclear Reactors in Iran

https://www.powermag.com/russia-planning-to-build-more-nuclear-reactors-in-iran/

## **FYI - FUSION NEWS/ALERTS**

#### [Of Interest]

#### High-performance computing at a crossroads

https://www.science.org/doi/10.1126/science.adu0801

#### Recent Peer-Reviewed Articles of Interest

#### Progress and issues with pulsed magnetic fusion

https://pubs.aip.org/aip/pop/article/32/2/022507/3336518/Progress-and-issues-with-pulsed-magnetic-fusion

## DISCOVER: New integrated code to simulate helium detached plasma in a linear device

https://pubs.aip.org/aip/pop/article/32/2/022508/3336561/DISCOVER-New-integrated-code-to-simulate-helium

#### Dust-acoustic solitons in self-gravitating magnetized dusty plasmas

https://pubs.aip.org/aip/pop/article/32/2/022115/3336524/Dust-acoustic-solitons-in-self-gravitating

## Electron cyclotron resonance (ECR) plasmas: A topical review through representative results obtained over the last 60 years

https://pubs.aip.org/aip/jap/article/137/7/070701/3336643/Electron-cyclotron-resonance-ECR-plasmas-A-topical

# On the reliability of a modification of the fluid model of a glow discharge incorporating the calculation of the local EEDF at each point in space

https://pubs.aip.org/aip/pop/article/32/2/023904/3336663/On-the-reliability-of-a-modification-of-the-fluid

## Integrated modeling of advanced tokamaks for tearing mode avoidance on DIII-

https://pubs.aip.org/aip/pop/article/32/2/022510/3336666/Integrated-modeling-of-advanced-tokamaks-for

# Magnetic modulation of keyhole instability during laser welding and additive manufacturing

https://www.science.org/doi/10.1126/science.ado8554