

## FYI – FUSION NEWS/ALERTS

Date: 19 Dec 2025

### FYI - Fusion News/Alerts

#### **Magnet cold test facility - First coil ready to face deep-space cold**

<https://www.iter.org/node/20687/first-coil-ready-face-deep-space-cold>

[Latest ITER Newsline: <https://www.iter.org/whatsnew/481>]

#### **Fusion isn't here — but leading startup is making construction progress**

<https://www.axios.com/2025/12/11/commonwealth-fusion-energy-sun-power>

#### **Solid cryogenic hydrogen pellet impact measurements at 500 m/s**

[https://www.cea.fr/drif/irig/english/Pages/News/Highlights/2025/31\\_DSBT.aspx](https://www.cea.fr/drif/irig/english/Pages/News/Highlights/2025/31_DSBT.aspx)

#### **ITER builds global, high-speed data backbone for remote scientific participation**

<https://www.computerweekly.com/feature/ITER-builds-global-high-speed-data-backbone-for-remote-scientific-participation>

#### **How AI will help get fusion from lab to grid by the 2030s**

<https://www.weforum.org/stories/2025/12/how-ai-will-help-get-fusion-from-lab-to-grid-by-the-2030s/>

#### **AI meets Fusion – The New Kid in the Control Room**

<https://euro-fusion.org/eurofusion-news/ai-and-fusion-in-the-control-room/>

#### **UKAEA unveils its latest nuclear fusion cryogenic test rig**

<https://www.engineerlive.com/content/ukaea-unveils-its-latest-nuclear-fusion-cryogenic-test-rig>

#### **Thea Energy Completes Fusion Power Plant Preconceptual Design**

<https://www.powermag.com/thea-energy-completes-fusion-power-plant-preconceptual-design/>

#### **Germany produces hydrogen plasma at 20 million °C — It worked for just 360 seconds but its “promising”**

<https://energiesmedia.com/germany-produces-hydrogen-plasma-at-20-million-c/>

#### **Distinguished Professor Chandrashekhar Joshi Appointed Inaugural Holder of Mukund Padmanabhan Term Chair in Excellence**

<https://samueli.ucla.edu/distinguished-professor-chandrashekhar-joshi-appointed-inaugural-holder-of-mukund-padmanabhan-term-chair-in-excellence/>

#### **Lucideon appointed by the UKAEA**

<https://www.niauk.org/lucideon-appointed-by-the-ukaea/>

#### **DOE funding for university-led nuclear infrastructure projects**

<https://www.neimagazine.com/news/doe-funding-for-university-led-nuclear-infrastructure-projects/>

### How Computational Physics Is Shaping Modern Science

<https://shooliniuniversity.com/blog/how-computational-physics-is-shaping-modern-science/?amp=1>

### Genesis Mission Starting to Take Shape

<https://www.aip.org/fyi/genesis-mission-starting-to-take-shape>

### **Recent Peer-Reviewed Articles of Interest**

#### Fusion and fission of particle-like chiral nematic vortex knots

<https://www.nature.com/articles/s41567-025-03107-0>

#### Demonstration of scissor-cross ionization injection in laser wakefield accelerators

<https://www.nature.com/articles/s42005-025-02440-3>

#### The mechanism of anomalous power absorption in X2-mode ECRH experiments at the TJ-II stellarator

<https://pubs.aip.org/aip/pop/article/32/12/122505/3374847/The-mechanism-of-anomalous-power-absorption-in-X2>

#### Turbulence-induced safety factor profile flattening at rational surfaces in tokamaks with low magnetic shear

<https://iopscience.iop.org/article/10.1088/1361-6587/ae1da8>

### **[Of Interest]**

#### New breakthrough in detecting “ghost particles” from the Sun

<https://www.ox.ac.uk/news/2025-12-12-new-breakthrough-detecting-ghost-particles-sun>