

## FYI – LIBRARY NEWS/ALERTS

Date: 13 Jun 2025

### FYI - Fusion News/Alerts

#### **ITER publishes research plan R&D needs**

<https://www.iter.org/node/20687/iter-publishes-research-plan-rd-needs>

[Latest ITER Newsline: <https://www.iter.org/whatsnew/460>]

#### **The F4E Fusion Observatory presents a report on private sector investment**

<https://fusionforenergy.europa.eu/news/f4e-fusion-observatory-private-investment-report/>

#### **Unprecedented new device at PPPL will help to unravel the mysteries of the universe**

<https://www.pppl.gov/news/2025/unprecedented-new-device-pppl-will-help-unravel-mysteries-universe>

#### **The Technologies Fueling the Future of Fusion**

<https://newscenter.lbl.gov/2025/06/12/the-technologies-fueling-the-future-of-fusion/>

#### **Advancements in understanding helium retention behavior in plasma facing component for fusion reactor applications**

<https://www.eurekalert.org/news-releases/1087252>

#### **Plasma Voids Drive Tokamak Turbulence**

<https://physics.aps.org/articles/v18/s79>

#### **Accelerating fusion research via supercomputing**

<https://www.nature.com/articles/s42254-025-00837-1>

#### **SOFT Innovation Prize 2026**

[https://cordis.europa.eu/programme/id/HORIZON\\_EURATOM-2026-SOFT-PRIZE](https://cordis.europa.eu/programme/id/HORIZON_EURATOM-2026-SOFT-PRIZE)

#### **Ellipsoidal water-based dust grains in a dusty plasma**

<https://www.aip.org/scilights/ellipsoidal-water-based-dust-grains-in-a-dusty-plasma>

#### **Here's what happens when quark-gluon plasma 'splashes' during the most energetic particle collisions**

<https://phys.org/news/2025-06-quark-gluon-plasma-splashes-energetic.html>

#### **Argonne's Innovations highlighted at 2025 American Nuclear Society Meeting**

<https://www.anl.gov/article/argonne-innovations-highlighted-at-2025-american-nuclear-society-meeting>

#### **Highlighting women in quantum history**

<https://pubs.aip.org/physicstoday/online/44363/Highlighting-women-in-quantum-history>

## FYI – LIBRARY NEWS/ALERTS

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

**A generative artificial intelligence framework for long-time plasma turbulence simulations**

<https://pubs.aip.org/aip/pop/article/32/6/063905/3349364/A-generative-artificial-intelligence-framework-for>

**Nonlinear evolution of the mirror instability in the solar wind plasma:**

**Transition from humps to holes**

<https://pubs.aip.org/aip/pop/article/32/6/062902/3349363/Nonlinear-evolution-of-the-mirror-instability-in>

**Can electrostatic stresses affect charged water structures in weakly ionized plasmas?**

<https://pubs.aip.org/aip/pop/article/32/6/063702/3349362/Can-electrostatic-stresses-affect-charged-water>

**Filamentation instability of dust-acoustic wave at the initial stages of void formation in a current-driven collisional dusty plasma with variable dust charges**

<https://pubs.aip.org/aip/pop/article/32/6/063703/3349459/Filamentation-instability-of-dust-acoustic-wave-at>

**Liquid carbon formed using a high-energy laser**

<https://www.nature.com/articles/d41586-025-01782-w>

**Kernel ridge regression estimation of high-frequency signals for nuclear fusion diagnostics**

<https://www.sciencedirect.com/science/article/pii/S0920379625004570>

**Effect of Dalton's law on the shape of ion-acoustic solitons in a bi-ion plasma**

<https://pubs.aip.org/aip/pop/article/32/6/060701/3349458/Effect-of-Dalton-s-law-on-the-shape-of-ion>

**[Of Interest]**

**Happy birthday quantum mechanics! I got a ticket to the ultimate physics party**

<https://www.nature.com/articles/d41586-025-01860-z>

**U.K. science funding to remain flat for next 4 years**

<https://www.science.org/content/article/u-k-science-funding-remain-flat-next-4-years>