# **FYI - FUSION NEWS/ALERTS**

Date: 04 June 2024

## Knowledge dissemination - ITER enters a shared-information era

https://www.iter.org/newsline/-/4043

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

## All approach elevates plasma performance and stability across fusion devices

https://engineering.princeton.edu/news/2024/06/03/ai-approach-elevates-plasma-performance-and-stability-across-fusion-devices

#### **Updating the way the Lab computes**

https://www.pppl.gov/news/2024/updating-way-lab-computes

## Industrial ecosystem - Suppliers see growing opportunities

https://www.iter.org/newsline/-/4046

## **DIII-D National Fusion Program Completes Facility Upgrade**

https://www.ga.com/diii-d-national-fusion-program-completes-facility-upgrade

## **Dutch Fusion Day Shows Drive to Realise Fusion**

https://euro-fusion.org/member-news/dutch-fusion-day-shows-drive-to-realise-fusion/

## Modeling the threat of nuclear war

https://news.mit.edu/2024/modeling-threat-nuclear-war-eli-sanchez-0529

## Fusion Energy included in Proposed IRA Clean Energy Tax Credits

https://www.fusionindustryassociation.org/fusion-energy-included-in-proposed-ira-clean-energy-tax-credits/

## Exporting inspiration: PPPL brings its Young Women's Conference to the West Coast

https://www.pppl.gov/news/2024/exporting-inspiration-pppl-brings-its-young-women%E2%80%99s-conference-west-coast

## New nuclear included in draft Korean energy plan

https://world-nuclear-news.org/Articles/New-nuclear-included-in-draft-Korean-energy-plan

## Dark matter could make our galaxy's innermost stars immortal

https://phys.org/news/2024-05-dark-galaxy-innermost-stars-immortal.html

# NERSC Collaborates to Advance Fusion Energy Research with New 'Superfacility' Model

https://www.hpcwire.com/off-the-wire/nersc-collaborates-to-advance-fusion-energy-research-with-new-superfacility-model/

## Aurora supercomputer heralds a new era of scientific innovation

https://www.anl.gov/article/aurora-supercomputer-heralds-a-new-era-of-scientific-innovation

#### Hungary and Belarus sign nuclear co-operation roadmap

https://www.neimagazine.com/news/hungary-and-belarus-sign-nuclear-co-operation-roadmap/

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Slow-motion spectroscopy paves the way for a nuclear clock

https://pubs.aip.org/physicstoday/article/77/6/12/3294387/Slow-motion-spectroscopy-paves-the-way-for-a

Young physicists excited to network through the International Association of Physics Students

https://pubs.aip.org/physicstoday/article/77/6/28/3294596/Young-physicists-excited-to-network-through-the

Fortum to modernise low-pressure turbines at Loviisa NPP

https://www.neimagazine.com/news/fortum-to-modernise-low-pressure-turbines-at-loviisa-npp/

The universe's biggest explosions made elements we are composed of, but there's another mystery source out there

https://phys.org/news/2024-05-universe-biggest-explosions-elements-mystery.amp

## Recent Peer-Reviewed Articles of Interest

Dipole-driven multidimensional fusion: An insightful approach to the formation of superheavy nuclei

https://journals.aps.org/prc/accepted/73074Y4dC941b678879f4b898f7b7c83e48de7f9c

Mechanistic study of moisture corrosion of FeCr alloys in molten salts by ab-initio molecular dynamics simulations

https://www.nature.com/articles/s43246-024-00528-x

Theoretical investigation of structural, electronic, mechanical and thermodynamic properties of W-Ru alloys: Promising high temperature alloy materials <a href="https://www.sciencedirect.com/science/article/pii/S0920379624003740">https://www.sciencedirect.com/science/article/pii/S0920379624003740</a>

First results of Non-Evaporable Getter pump studies for the application in the EAST tokamak

https://www.sciencedirect.com/science/article/pii/S0042207X24003907

Studies of erosion-deposition of plasma-facing materials due to plasma-wall interactions in EAST tokamak

https://www.sciencedirect.com/science/article/pii/S0022311524002976

A novel joint-less second-generation high-temperature superconducting toroidal coil: Promise for fabricating compact toroidal magnetic fields

https://www.sciencedirect.com/science/article/abs/pii/S0921453424000649