

Date: 14 June 2024

## **Bhatia named new head of ITER projects at PPPL**

<https://www.pppl.gov/news/2024/bhatia-named-new-head-iter-projects-pppl>

## **Tokamak Energy to use digital twin with ST40 fusion machine**

<https://world-nuclear-news.org/Articles/Tokamak-Energy-to-use-digital-twin-with-ST40-fusio>

## **Researchers Directly Simulate the Fusion of Oxygen and Carbon Nuclei**

<https://science.osti.gov/np/Highlights/2024/6d>

## **New plasma escape mechanism could protect fusion vessels from excessive heat**

<https://www.pppl.gov/news/2024/new-plasma-escape-mechanism-could-protect-fusion-vessels-excessive-heat>

## **Future colliders and fusion reactors**

<https://home.cern/news/news/knowledge-sharing/future-colliders-and-fusion-reactors>

## **Joining forces for fusion**

<https://www.neimagazine.com/analysis/joining-forces-for-fusion/>

## **Xcimer raises \$100M to build prototype laser system for inertial fusion**

<https://www.neimagazine.com/news/xcimer-raises-100m-to-build-prototype-laser-system-for-inertial-fusion/>

## **Pair plasmas found in deep space can now be generated in the lab**

<https://www.rochester.edu/newscenter/relativistic-pair-plasma-beams-experiments-610432/>

## **Australian undergrads take on tokamak project**

<https://www.ans.org/news/article-6114/australian-undergrads-take-on-tokamak-project/>

## **OPG investigates fusion as future option for Ontario**

<https://www.world-nuclear-news.org/Articles/OPG-investigates-fusion-as-future-option-for-Ontar>

## **New fusion energy strategies and partnerships announced at White House event**

<https://www.ans.org/news/article-6105/new-fusion-white-house/>

## **New insights on the role of nucleon exchange in nuclear fusion**

<https://phys.org/news/2024-06-insights-role-nucleon-exchange-nuclear.html>

## **Tractebel supports First Light Fusion in making inertial fusion a reality**

<https://www.neimagazine.com/pressreleases/tractebel-supports-first-light-fusion-in-making-inertial-fusion-a-reality/>

### **DTU Professor wants to pave the way for fusion power plants**

<https://www.dtu.dk/english/news/all-news/dtu-professor-wants-to-pave-the-way-for-fusion-power-plants?id=2d9b0a40-fdc9-4276-9af2-003e387215d5>

### **Giant Chips Give Supercomputers a Run for Their Money**

<https://spectrum.ieee.org/cerebras-wafer-scale-engine>

### **Works begins on Romania's tritium removal facility**

<https://www.world-nuclear-news.org/Articles/Works-begins-on-Romania-s-tritium-removal-facility>

### **Digital twin to help accelerate commercial fusion**

<https://www.theengineer.co.uk/content/news/digital-twin-to-help-accelerate-commercial-fusion>

### **"It feels rather unreal, but you just can't give up!"**

<https://www.mpg.de/22071076/rebuilding-ukrainian-research-styervoyedov?c=2249>

### **Team develops predictive tool for designing complex metal alloys that can withstand extreme environments**

<https://phys.org/news/2024-06-team-tool-complex-metal-alloys.html>

### **UK energy import reliance will grow if renewables are not boosted, think tank warns**

<https://eandt.theiet.org/2024/06/10/uk-energy-import-reliance-will-grow-if-renewables-are-not-boosted-climate-think-tank>

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

#### **Collective Neutrino Oscillations and Heavy-element Nucleosynthesis in Supernovae: Exploring Potential Effects of Many-body Neutrino Correlations**

<https://iopscience.iop.org/article/10.3847/1538-4357/ad393d>

#### **Turbulence Transition in Magnetically Confined Hydrogen and Deuterium Plasmas**

<https://journals.aps.org/prl/abstract/10.1103/PhysRevLett.132.235101>

#### **Liquid-metal experiments on geophysical and astrophysical phenomena**

<https://www.nature.com/articles/s42254-024-00724-1>

#### **Neutronic analysis of a tokamak hybrid blanket cooled by thorium-molten salt fuel mixture**

<https://www.sciencedirect.com/science/article/abs/pii/S0149197024002567>