# FYI – FUSION NEWS/ALERTS

Date: 19 July 2024

**3D visualization brings nuclear fusion to life**
https://actu.epfl.ch/news/3d-visualization-brings-nuclear-fusion-to-life/

**Vacuum vessel repair - A portfolio**
https://www.iter.org/newsline/-/4058

**European Physical Society - ITER presents its new plans**
https://www.iter.org/newsline/-/4062
Latest ITER Newsline: [https://www.iter.org/whatsnew]

**Researchers Directly Simulate the Fusion of Oxygen and Carbon Nuclei**
https://www.energy.gov/science/np/articles/researchers-directly-simulate-fusion-oxygen-and-carbon-nuclei

**Delivering fusion energy needs bold decisions and sustained commitment**
https://www.nature.com/articles/s42254-024-00742-z

**Commonwealth Fusion Systems supplies superconducting magnets to university**
https://www.world-nuclear-news.org/Articles/CFS-supplies-superconducting-magnets-to-university

**Fusion funding and jobs growing fast, says key industry report**
https://world-nuclear-news.org/Articles/Funding-and-jobs-growing-fast-in-fusion,-says-key

**First plasma marks major milestone in UW–Madison fusion energy research**
https://www.physics.wisc.edu/2024/07/18/first-plasma-marks-major-milestone-in-uw-madison-fusion-energy-research/

**Making Fusion Pay**
https://www.science.org/content/article/ceo-aims-revolutionize-cancer-killing-isotope-production-fusion-power

**AtkinsRéalis to develop pre-concept design for Type One Energy's fusion pilot plant**
https://www.neimagazine.com/news/atkinsrealis-to-develop-pre-concept-design-for-type-one-energys-fusion-pilot-plant/

**World's 1st cold fusion tech for clean energy generation unveiled in India**
https://interestingengineering.com/energy/hylenr-cold-fusion-demonstrated

**Caught in the actinium: New research could help design better cancer treatments**
https://phys.org/news/2024-07-caught-actinium-cancer-treatments.html

**Petawatt pulse pushes protons**
https://www.nature.com/articles/s41567-024-02559-0

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**Reflections on the Russian LEU ban**
https://www.neimagazine.com/analysis/reflections-on-the-russian-leu-ban/

**Take a look behind the scenes at the world's largest fusion experiment**
https://www.newscientist.com/article/mg26335000-300-take-a-look-behind-the-scenes-at-the-worlds-largest-fusion-experiment/

**Two LLNL Physicists Honored for International Collaboration**
https://lasers.llnl.gov/news/two-llnl-physicists-honored-international-collaboration

**First observation of the nuclear two-photon decay in bare atomic nuclei**
https://phys.org/news/2024-07-nuclear-photon-decay-atomic-nuclei.html

**L&T dispatches steam generator for India's Kaiga NPP**
https://www.neimagazine.com/news/lt-dispatches-steam-generator-for-indias-kaiga-npp/

**Sustainability Through Capacity Building: IAEA Hosts Conference on Nuclear Knowledge Management and Human Resources Development**
https://www.iaea.org/newscenter/news/sustainability-through-capacity-building-iaea-hosts-conference-on-nuclear-knowledge-management-and-human-resources-development

**Nuclear fuel simulators loaded into VVER-TOI at Kursk-II**
https://www.neimagazine.com/news/nuclear-fuel-simulators-loaded-into-vver-toi-at-kursk-ii/

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

**Foreword to Special Issue: Papers from the 65th Annual Meeting of the APS Division of Plasma Physics, October 30–November 3, 2023**
https://pubs.aip.org/aip/pop/article/31/7/070401/3303572/Foreword-to-Special-Issue-Papers-from-the-65th

**Early internal detection of magnetic tearing and implications for tokamak magnetohydrodynamic stability**
https://pubs.aip.org/aip/pop/article/31/7/070706/3303571/Early-internal-detection-of-magnetic-tearing-and

**Approach to startup inventory for viable commercial fusion power plant**
https://www.sciencedirect.com/science/article/pii/S0920379624004162

**Recovery of hydrogen plasma at the sub-nanosecond timescale in a plasma-wakefield accelerator**
https://www.nature.com/articles/s42005-024-01739-x

**Search for beyond-mean-field signatures in heavy-ion fusion reactions**
https://journals.aps.org/prc/abstract/10.1103/PhysRevC.109.L041601

**Extended X-ray absorption spectroscopy using an ultrashort pulse laboratory-scale laser-plasma accelerator**
https://www.nature.com/articles/s42005-024-01735-1