FYI – FUSION NEWS/ALERTS

Date: 24 Dec 2024

Podcast: A Milestone in Laser-Plasma Acceleration
https://physics.aps.org/articles/v17/185

Building the fusion energy rulebook
https://www.neimagazine.com/analysis/building-the-fusion-energy-rulebook/

PPPL leading two CHIPS and Science Act projects
https://www.pppl.gov/news/2024/pppl-leading-two-chips-and-science-act-projects

Power Electronics Development for Plasma and Nuclear Fusion Systems
https://psatellite.com/technology/power-electronics-development-for-plasma-and-nuclear-fusion-systems/

Plasma heating efficiency in fusion devices boosted by metal screens
https://www.pppl.gov/news/2024/plasma-heating-efficiency-fusion-devices-boosted-metal-screens

Will the World's First Nuclear Fusion Power Plant Be Built in Virginia? Here's Why We're Skeptical
https://www.scientificamerican.com/article/will-the-worlds-first-nuclear-fusion-power-plant-be-built-in-virginia-heres/

Stabilizing fusion reactions is a learning process — for AI systems and the engineers who design them
https://engineering.princeton.edu/news/2024/12/20/stabilizing-fusion-reactions-learning-process-ai-systems-and-engineers-who-design-them

Kyoto Fusioneering Europe Secures Another Landmark Grant from BMBF
https://kyotofusioneering.com/en/news/2024/12/18/2743

2024 Wrap-Up: Will Nuclear Fusion Be the Next Renewable Energy?
https://eepower.com/tech-insights/2024-wrap-up-will-nuclear-fusion-be-the-next-renewable-energy

New radar algorithm reveals hidden dance of ionospheric plasma
https://phys.org/news/2024-12-radar-algorithm-reveals-hidden-ionospheric.html

Seeking Signatures of High-Energy Vortex States
https://physics.aps.org/articles/v17/s157

The Convention on Nuclear Safety: 30 Years of Enhancing Nuclear Safety Worldwide
https://www.iaea.org/newscenter/news/the-convention-on-nuclear-safety-30-years-of-enhancing-nuclear-safety-worldwide

Renewal of the “Space: sciences and challenges of the space sector” Chair
https://www.polytechnique.edu/en/news/renewal-space-sciences-and-challenges-space-sector-chair

FYI – FUSION NEWS/ALERTS

CERN highlights in 2024 celebrating 70 years
https://home.cern/news/news/cern/cern-highlights-2024-celebrating-70-years

Problem-solver Chad Parish advances materials for nuclear safety
https://www.ornl.gov/news/problem-solver-chad-parish-advances-materials-nuclear-safety

LLNL Selected to Lead Next-Gen Extreme Ultraviolet Lithography Research
https://lasers.llnl.gov/news/llnl-selected-lead-next-gen-extreme-ultraviolet-lithography-research

Department of Energy Announces $179 Million for Microelectronics Science Research Centers
https://www.energy.gov/science/articles/department-energy-announces-179-million-microelectronics-science-research-centers

Lasers Unlock the Next Frontier in Particle Acceleration
https://scitechdaily.com/lasers-unlock-the-next-frontier-in-particle-acceleration/

[Of Interest] We May Be on the Brink of Finding the Real Planet Nine
https://www.scientificamerican.com/article/if-planet-nine-exists-well-find-it-soon/

Scientific Reports: Collection-Fusion energy
Submission status: Open
Submission deadline: 18 September 2025
"*...This Collection welcomes original studies on developing advanced materials (e.g., superconducting magnets and heat-resistant alloys/ceramics) capable of withstanding the extreme conditions of a fusion reactor. It also encourages efforts to refine diagnostic and simulation tools to enhance our understanding of plasma behavior and reactor performance, paving the way for more optimized fusion systems.*"
https://www.nature.com/collections/ddejeddecc