TAU Systems announces collab with Uni of Central Florida to advance compact laser-powered particle accelerator tech

Partnership combines TAU Systems' pioneering compact radiation testing platform with UCF's world-leading expertise in microelectronics and radiation effects.

UCF & TAU Systems collaboration on Space Radiation

CARLSBAD, CA, UNITED STATES, May 28, 2026 /EINPresswire.com/ -- TAU Systems, the developer of next-generation compact laser-powered accelerators, today announced a collaboration with the University of Central Florida (UCF). The partnership will see the two organizations work together to validate TAU Systems' novel radiation testing technologies and methods, explore the deployment of those technologies at UCF, and jointly pursue business development and funding opportunities in the field.

TAU Systems' compact laser-powered accelerator (LPA) technology reduces the footprint of conventional particle accelerators from kilometers to meters, enabling affordable, accessible beam-time for industries ranging from semiconductors and space electronics to medical imaging and materials science. The collaboration will draw on UCF's deep expertise in microelectronics and radiation effects to validate TAU Systems' radiation testing platform ahead of a potential deployment at the university, while creating a shared foundation for pursuing grants, contracts, and commercial partnerships.

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> *Jerome Paye, CEO of TAU Systems*

Jerome Paye, CEO of TAU Systems, said: “Academic partnerships are central to how we move this technology

forward. Universities like UCF bring deep scientific expertise, world-class facilities, and a culture of rigorous validation that complements everything we are doing on the commercial side. This collaboration gives us the opportunity to stress-test our radiation testing methods, while opening doors to new funding and market opportunities neither of us could pursue as effectively alone. That is the real value of working closely with academia, it accelerates the path from breakthrough science to deployable technology."

"Access to heavy-ion beam facilities is one of the major bottlenecks in radiation effects research today," says Enxia Zhang, assistant professor in UCF's Department of Electrical and Computer Engineering and lead of the Radiation Effects Exploration Laboratory (REEL). "These facilities are limited in number, heavily oversubscribed and often require long scheduling timelines. That makes it difficult to rapidly evaluate modern microelectronics technologies that are increasingly being deployed in space and defense systems."
The collaboration builds on TAU Systems' growing network of academic and institutional partnerships, which includes prior work with the University of Texas at Austin, where in 2023 the two organizations demonstrated the world's first 10 GeV electron beam produced in just 10 centimeters, as well as a DARPA-funded program developing next-generation radiation testing capabilities for space-bound electronics. UCF's established strengths in microelectronics and radiation effects, combined with its long-standing identity as SpaceU, with roots in supporting NASA and the broader space industry since the university's founding, make it a natural partner as TAU Systems continues to validate and scale its technology toward broader commercial and institutional deployment.

UCF is a leading academic institution for space-focused technology and workforce development serving the aerospace, defense, and semiconductor industries. Central to this commitment is CRESST, the Center for Reliability Evaluation of Space and Semiconductor Technologies, a new UCF initiative focused on radiation effects testing and workforce development. CRESST will offer priority radiation test services, electronics failure analysis, and a semiconductor and packaging innovation hub unique in the United States.

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About TAU Systems

TAU Systems is an Austin, Texas-based deep-tech company commercializing the first compact particle accelerators and specialized LPA-driven free-electron lasers that combine the capabilities of large accelerators with a small footprint to provide easy and affordable beam-time access for any company. Led by premier experts in laser-driven particle accelerators, particle beam transport systems, and free-electron lasers, TAU is democratizing access for the progress of semiconductor manufacturing and radiation testing spacebound electronics Learn more at www.tausystems.com.

Jules Tipler

Influence emobility jules@influenceemobility.com
+44 7811 166 796

Jules Tipler
Influence emobility
email us here