

Abstract Submitted
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A US Based Ultrafast Interdisciplinary Research Facility PAUL GUEYE¹, Hampton University, WENDELL HILL, University of Maryland College Park, ANTHONY JOHNSON, University of Maryland Baltimore County — The US scientific competitiveness on the world arena has substantially decreased due to the lack of funding and training of qualified personnel. Most of the potential workforce found in higher education is composed of foreign students and post-docs. In the specific field of low- and high-field science, the European and Asian communities are rapidly catching-up with the US, even leading in some areas. To remain the leader in ultrafast science and technology, new visions and commitment must be embraced. For that reason, an international effort of more than 70 countries for a US-based interdisciplinary research facility using ultrafast laser technology is under development. It will provide research and educational training, as well as new venues for a strong collaboration between the fields of astrophysics, nuclear/high energy physics, plasma physics, optical sciences, biological and medical physics. This facility will consist of a uniquely designed high contrast multi-lines concept housing twenty experimental rooms shared between four beams:[0.1 TW, 1 kHz], [10 TW, 9 kHz], [100-200 TW, 10 Hz] and [500 TW, 10 Hz]. The detail schematic of this multi-laser system, foreseen research and educational programs, and organizational structure of this facility will be presented.

¹For the IRIS Collaboration

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