

The Beams and Applications Seminar Series

Long-bunch-train, 9-mA operation at FLASH

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Bldg. 401, Room B2100
Friday, June 11, 1:30 PM

Host: M. White ASD

Operation with long bunch-trains is a fundamental advantage of the TESLA superconducting RF technology. The TTF/FLASH '9mA' studies program is led by DESY in collaboration with the ILC Global Design Effort. Goals of the program are to demonstrate reliable operation of FLASH and characterize performance limitations with "ILC-like" beams, namely 800us-long bunch trains with 9-mA average current and cavity gradients close to quench. The program also provides a critical demonstration of vector sum LLRF control of many accelerating cavities fed from a single RF source.

During accelerator studies in September 2009, FLASH ran with the full 800-us-long bunch trains and several milliamperes of current. It achieved 600-us-long bunch trains with the full 9mA.

FEL studies with long bunch trains will begin in the next few weeks, with additional 9-mA studies anticipated in January 2011.

For more information visit

http://aps.anl.gov/News/Meetings/Beams_and_Applications_Seminars/

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(mnolasco@aps.anl.gov, 630-252-6159) to arrange for a gate pass.