

## Progress in Low Level RF System at FLASH Facility

*Tuesday, 1 October 2013 12:00 (20 minutes)*

The Free-Electron Laser in Hamburg (FLASH) is a user facility delivering femtosecond short radiation pulses in the wavelength range between 4.2 and 44 nm using the SASE principle. Currently the major extension of the facility is ongoing. The modifications include a new experimental hall to double the number of user stations and an additional variable-gap undulator in a separate tunnel to be able to deliver two largely independent wavelengths to two different user stations simultaneously. The electron beam will be switched between the present fixed-gap undulator line and the new variable gap undulator. In the meantime the FLASH low level RF system is being upgraded to MicroTCA-based system to replace the VME-based system and serve as a test bench for the European X-ray Free Electron Laser LLRF system. We will present details on the new FLASH LLRF system setup. The benefits and measurement results of the newly installed system will be given. We will also show the first preliminary results demonstrating simultaneous RF operation for multi beam-lines at the FLASH facility.

**Primary author:** Dr AYVAZYAN, Valeri (DESY)

**Presenter:** Dr AYVAZYAN, Valeri (DESY)

**Session Classification:** Session 3: Systems