

LLRF SYSTEM REQUIREMENTS FOR SRF DRIVEN NEXT GENERATION LIGHT SOURCES

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Abstract

A number of next generation light sources have been proposed which make use of superconducting radio frequency (SRF) cavities as the primary accelerating elements. The cavities are used in injectors, standard linac configurations and energy recovered linac configurations. We will describe the general requirements for the low level RF systems used in next generation light sources which are driven by SRF linacs. The talk will describe the general schemes used for each of these types of machines. It will describe the general requirements for the LLRF systems for operations as well as for commissioning the cavities once they are installed in the accelerator. Operational issues and challenges will also be discussed.

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