

Experience in continuous wave and long pulse operation of TESLA cavities cryomodules

The continuous wave operation scenario of TESLA cavities based accelerators is being investigated by different scientific facilities worldwide. The evolution from pulsed mode operation to constant operation requires not only redesign of cryogenic system or new design of high power RF amplifiers but also significant modifications of LLRF control system.

In this paper the experiences concerning CW and LPO operation of the single cryomodule is presented. Development of the MTCA.4 HW platform based LLRF control system hardware, firmware and high level software towards long pulse operation are summarized.

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