

Phase setting issues for the SPIRAL2 LINAC

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The SPIRAL2 superconducting LINAC accelerates beams of different species, in a large energy range. During operation, the beam requested by the physics can change quite often and it is mandatory that beams that have been already tuned can be obtained again by simple application of the machine parameters already used. This reduces the accelerator retuning time and increases the machine availability for the physics experiences. Voltages and more particularly phases of all the cavities are among the crucial parameters for a quick retuning. Proper beam tuning is monitored via the Beam Position Monitors. This paper focuses on the phase issues, reminds the way the reference frequency distribution, the LLRF and the BPM works and are used in the tuning procedures, and summarizes the upgrade foreseen to improve the cavity phase setting reliability

Footnotes

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