

Spill ripple compensation with direct field ripple measurements

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Inevitably, to evaluate the quality of the slow extracted beams delivered to experiments, we need to understand how different frequency components develop. How we evaluate this is to look at the beam spills in a beamline. However, while those are the end result and what the experiments see, they don't directly represent how the different frequencies get imprinted into the spill. This is what transit time analysis tells us. To evaluate the ripple components more realistically, we plan to use direct field ripple measurements in a reference magnet that includes the vacuum chamber. This talk will present the idea and the status of the project.

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