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## Transverse Beam dynamics simulations benchmarked with ESS Bilbao injector measurements for ISOLDE ISRS project

Monday 26 August 2024 16:00 (2 hours)

A multi-harmonic buncher cavity, MHB, is being designed by ESS Bilbao for HIE-ISOLDE ISRS project at CERN, to bunch beam pulses with 5 keV/u input energy. The MHB will be tested with ESS Bilbao light-ion injector. Transverse beam dynamics simulations were carried out to analyse preliminary measurements from hydrogen beams produced at 5 and 10 kV. Results have demonstrated that ESS Bilbao injector can produce H+ and H2+ beams with 5 keV/u, for an optimum characterization of MHB cavity.

## Footnotes

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