## **LHC Injectors Upgrade Workshop**



Contribution ID: 16 Type: not specified

## PS intensity reach and longitudinal parameters after

Wednesday 13 February 2019 18:40 (20 minutes)

- · Keywords: Longitudinal instabilities, past and future RF improvements, beam quality, bunch rotation
- Questions to be answered:
  - What is the parameter reach in terms of intensity/longitudinal emittance? What was achieved in 2018 and what is expected from simulations with the further LS2 RF improvements?
  - What is the contribution of each of the upgrades (coupled-bunch, 1-turn delay, multi-harmonic feedbacks)?
  - Which impedance sources mainly excite the observed instabilities?
  - Are there any new ideas to further improve the longitudinal beam quality, e.g. bunch shape after rotation, to better suit the SPS?
  - What are the observed and expected bunch-by-bunch parameter variations (2018 and post-LIU)?

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Session Classification: Session 1: LIU beam performance