

MD 2427:

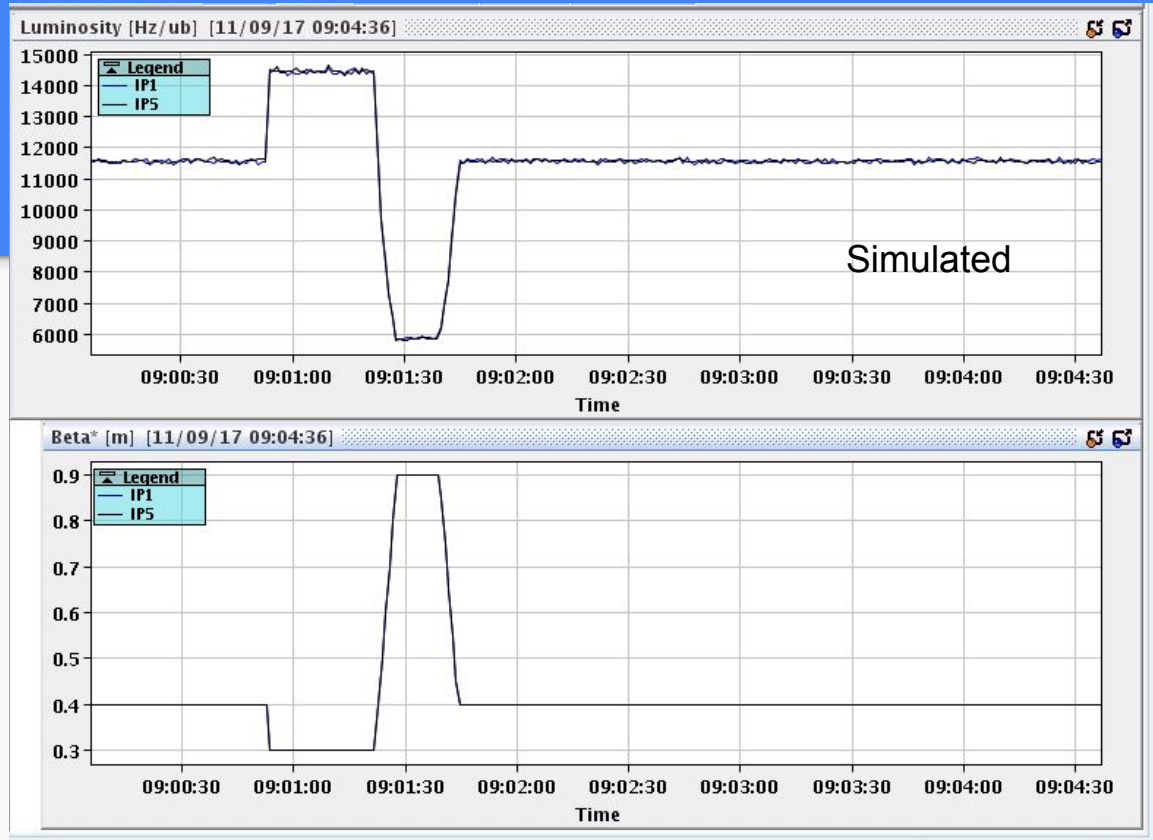
Beta* Levelling Mechanics

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Introduction

Work in progress to enable (discrete) beta* changes from the lumi server.



Purpose of the MD

- Test the new mechanics for beta* changes.
- Probe boundaries and limitations as input for further development:
 - Can we keep the beams "reasonably" in collisions?
 - Feedback settings?
 - Features missing?
- Time Requested: 8h

Description (WIP)

- Inject 2 nominal bunches so that collisions can be seen in all IPs
(Setup beam)
- Collide beams at FT (after Q-change)
- Use the new mechanics in the lumi server, to execute squeeze steps
 - will move powerconverters, OFB and collimators consistently
 - Steps back and forth
- If time permits, try combinations of xing angle changes, beta* changes and offset levelling
- Observables: lumi in all IPs (also in the levelled ones), Orbit, Losses