



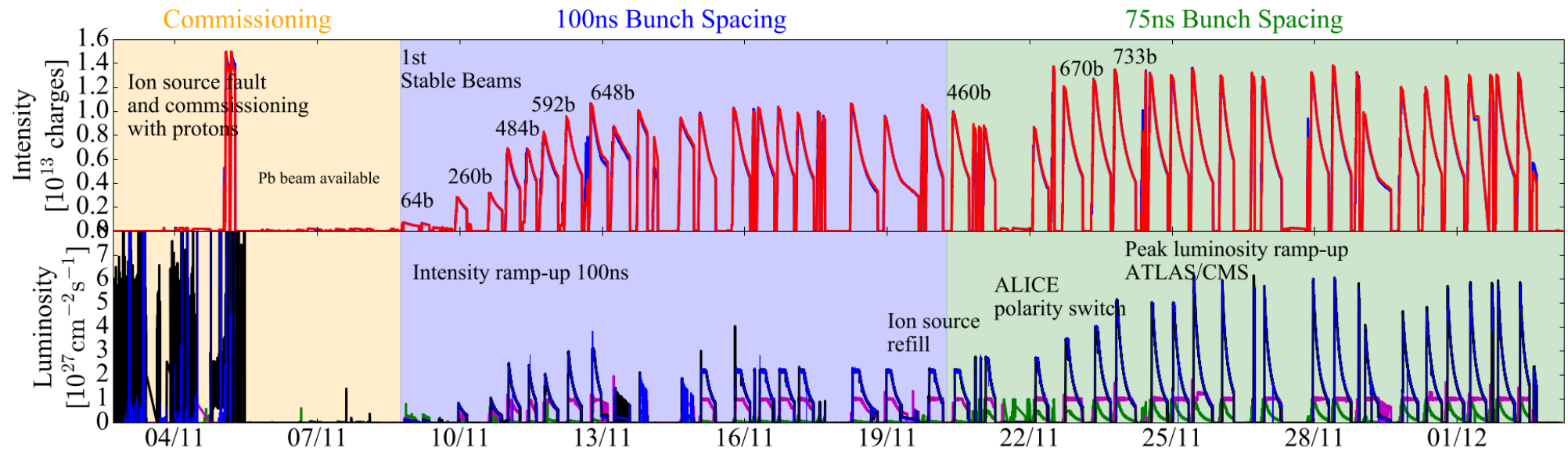
Intensity Ramp-Up for Pb Ion Run 2023

C. Wiesner, R. Bruce, C. Hernalsteens, J. Uythoven, D. Wollmann

MPP, September 1st, 2023

Intensity Ramp-up: Ion Run 2018

- Intensity steps of 64b – 260b – 480b (combined [checklist](#)) – 648b
- Two fills with, in total, >8h in stable beams for each intensity step
- Finally, intensity increased to 733b after ~10 days of operation with 648b



J. Jowett et al., WEYYPLM2, IPAC'19

Proposal Intensity Ramp-up: Ion Run 2023

- **Intensity steps:**
 - Cycle setup with low intensity
 - 80b, one fill, >2h in Stable Beams
 - 250b, two fills, >5h Stable Beams in total
 - 450b, two fills, >5h Stable Beams in total
 - Combined checklist before going to 850b
 - 850b, two fills, >5h Stable Beams in total
 - 1240b (full machine) corresponding to ~20 MJ of stored energy per beam
- **Assumes that 50 ns slip-stacked beam is used from the start of the ramp-up**
- **After Alice polarity reversal: 1x cycle with low intensity, 1x 450b fill (>2h in SB), then full machine**