

# PS Report week 47



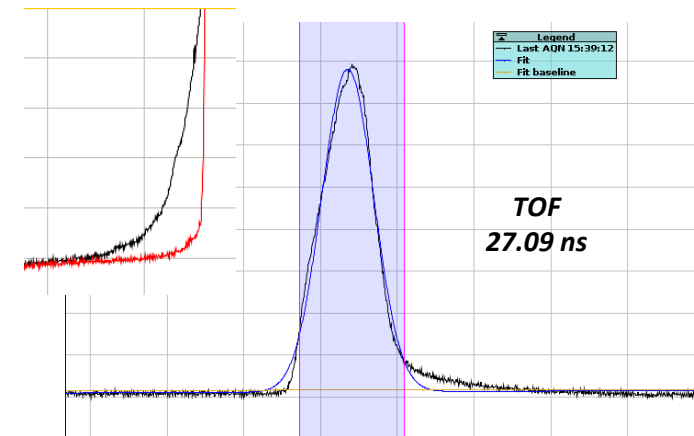
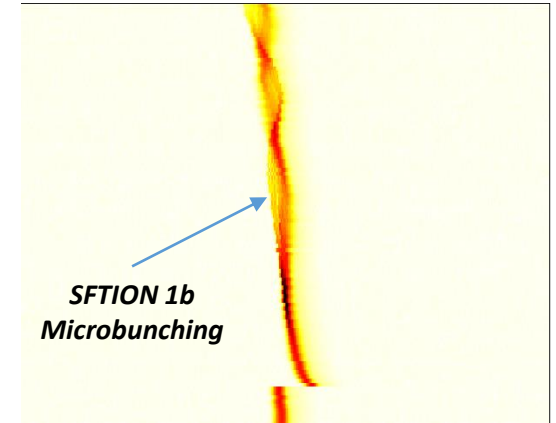
Many thanks  
to the PS OP and coordination teams as well as all equipment experts and support teams!

# Beam availability since last meeting



# Main issues / updates

- **Good availability and small number of faults, mostly affecting the ion chain**
- **All ion beams operational**
  - Single bunches sent to SFTION, mitigation of longitudinal instability at transition by increasing the longitudinal emittance.
  - Spill at variable energies sent for the CHIMERA run (EAST), three cycles prepared at 0.65, 0.75 and 1 GeV/u.
- **Optimization of TOF bunch for short bunch extraction**
  - Optimization of the gamma jump at transition crossing to mitigate transverse instability with small longitudinal emittance
  - 28ns bunch length at extraction, horizontal beam size OK, smaller vertical beam size
  - Bunch rotation adjusted for sharper rising edge of the bunch
- **Cavity C10-51 in spare until the end of the run (available in degraded mode)**
  - Mostly affects production of high intensity beams such as AD.
  - Can be used in case of trip of a cavity for low intensity beams (OK for ions).



# Status of operational beams

Fixed target beams	Status	Comment
SFTPRO (core only)	Operational	Available up to $2 \cdot 10^{12}$ p/p
SFTPRO (5 turn extraction)	Operational	Available up to $2.3 \cdot 10^{13}$ p/p
AD	Operational	Nominal beam (5 bunches)
TOF	Operational	Nominal and parasitic beams
EAST	Operational	<b>IEAST</b>
LHC-type beams	Status	Comment
LHCPILOT, LHCINDIV	Operational	
LHC25 (72b)	Operational	Operational at $1.2 \cdot 10^{11}$ p/b; Available up to $2.6 \cdot 10^{11}$ p/b
LHC25 (12b or 24b)	Operational	
LHC25 BCMS (48b)	Operational	Operational at $1.2 \cdot 10^{11}$ p/b Available up to $2.6 \cdot 10^{11}$ p/b
LHC25 8b4e (56b)	Operational	
AWAKE	Operational	Available up to $3 \cdot 10^{11}$ p/p
HiRadMat	Operational	
ILHC (1b)	Operational	<b>SFTION</b>
ILHC (4b)	Operational	

# Questions and Comments

## PS Coordinator for week 48+ – **Santa Claus**



Many thanks to you and to the PS operation team for the 2022 run on behalf of the PS coordination team!



**9:00** live meeting at the CCC on Wednesday/Friday

Zoom link to follow the meeting on remote: <https://cern.zoom.us/j/9372114100?pwd=L29BcmIHUENCdFBRSytXYVcrM1B4Zz09>

Meeting ID : 937 211 4100

Passcode: 525463