

# Brief PS status 18 May 2018

Frank Tecker, on behalf of PS operations and supervisor team



# PS Beams Overview

Operational Beam Status:	
LHC PROBE	Operational
LHC INDIV	Operational
LHC25#12b	Available at nominal intensity ( $1.3 \cdot 10^{11}$ ppb)
LHC25#72b	Available at nominal intensity ( $1.3 \cdot 10^{11}$ ppb)
LHC25#12b_BCMS	Available at nominal intensity ( $1.3 \cdot 10^{11}$ ppb)
LHC25#48b_BCMS	Available at nominal intensity ( $1.3 \cdot 10^{11}$ ppb)
LHC50#36b	Not set up
LHC100#18b_Split_1_4GeV	Setting-up ongoing
LHC25#56b_8b4e	Not set up
LHC25#32b_BCS_8b4e	Setting-up completed
LHC_ION_Early_Pb54	Setting-up ongoing
ILHC100#4b	Setting-up ongoing
SFTPRO-MTE	Available, intensity today at $1600 \cdot 10^{10}$ (up to $1800 \cdot 10^{10}$ tested)
EAST_North	Operational
EAST_IRRAD-CHARM	Operational, (PAXP502 around alarm level A)
EAST_Irrad_Probe	Not set up
TOF	Available up to $8 \cdot 10^{12}$ ppp (today @ $770 \cdot 10^{10}$ )
AD	Operational at $1.4 \cdot 10^{13}$ ppp

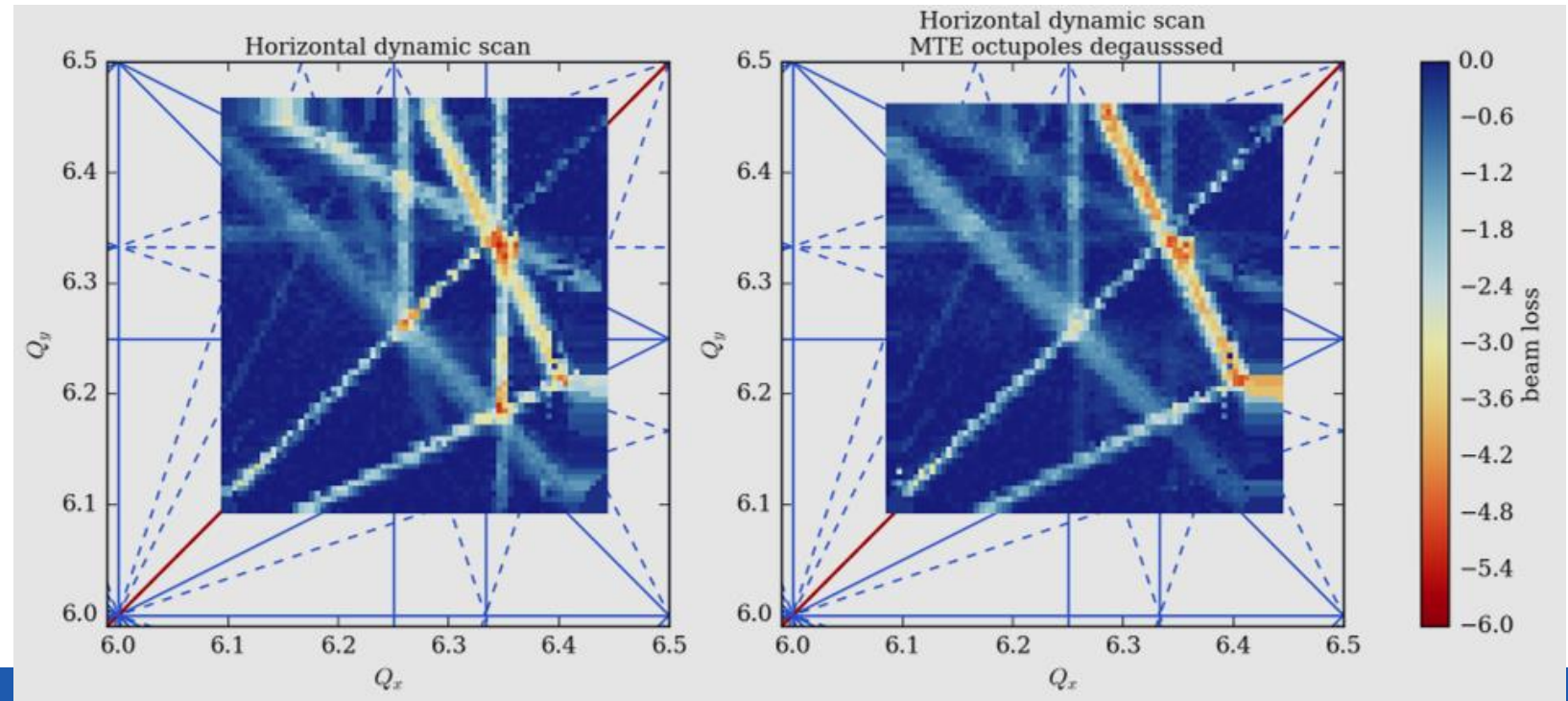
# PS studies

- 2<sup>nd</sup> dedicated MD for transfer line matching PSB -> PS
  - Measurement with PS SEM grids, kick response campaign
  - Procedure being drafted for multi-turn SEM grid measurements
- Parallel MDs for:
  - Space charge studies (Prepared cycle with 26 GeV ramp at start)
  - New sextupoles commissioning for chromaticity correction
  - nTOF intensity increase (with blow up at 2.5 GeV)
  - Tune diagram measurements
  - Beam missteering at injection
  - Studies for Quadrupolar Pick-up, 80 bunches production, KFA45 post-pulse ripple for different amplitudes
  - Beam measurements of resistive impedance; Recommissioning of coupled-bunch feedback; LHC25ns intensity ramp-up; Lead ion beam with 75 ns spacing

# HORIZONTAL TUNE SCAN *without/with* OCTUPOLES DEGAUSSING

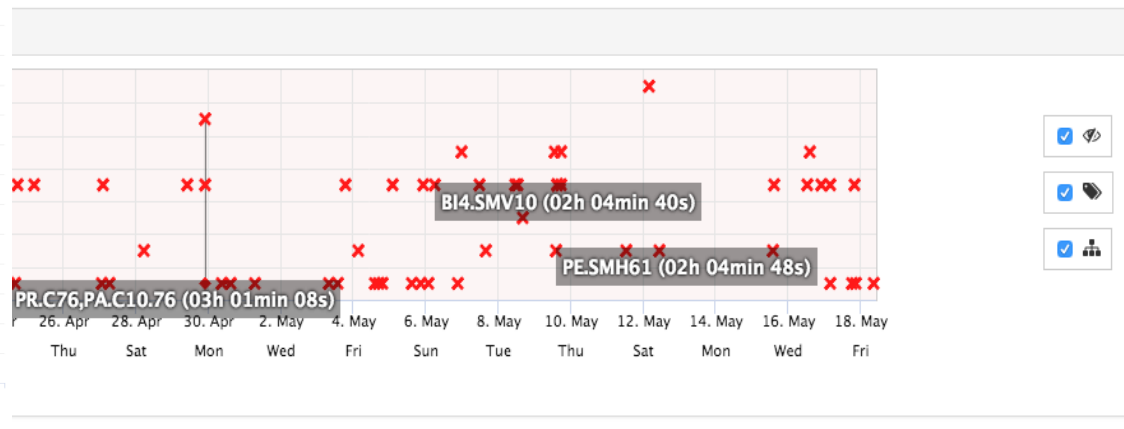
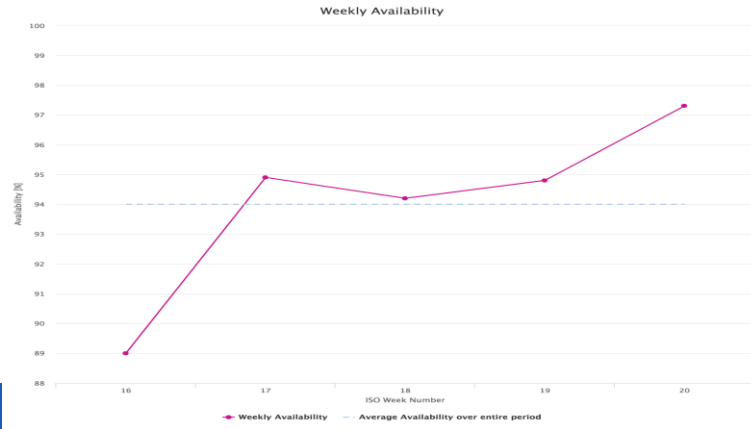
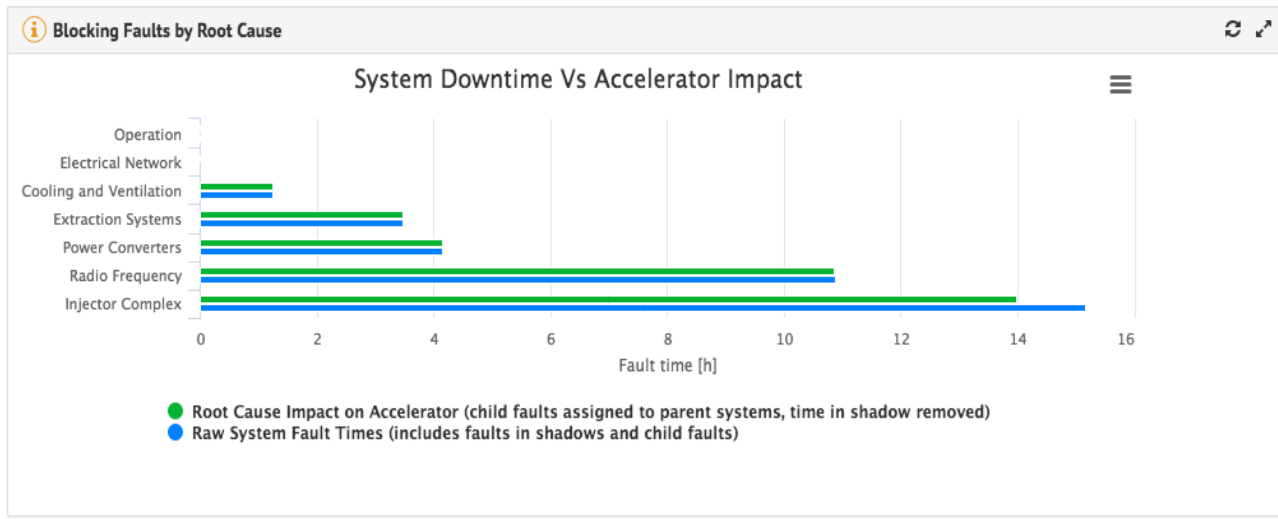
(2<sup>nd</sup> SET OF MEASUREMENTS-SAME-DAY-)

Myrsini Kaitatzi,  
Alexander Huschauer



# PS Availability during last 4 weeks

- Availability**  
95.0%
- Blocking Faults**  
69
- Total Faults**  
69
- Fault Duration (overlap excluded)**  
33.8h





[www.cern.ch](http://www.cern.ch)