

SF RC Report 2024 Week 25

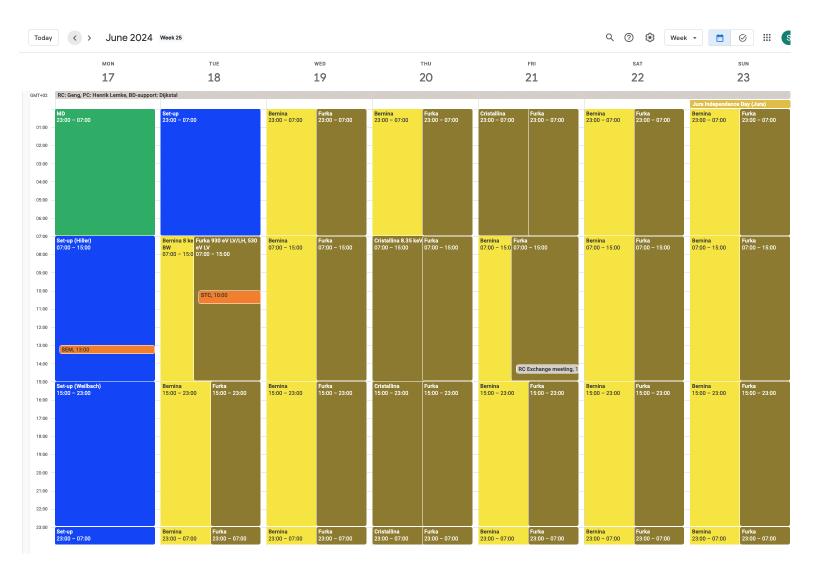
Qiao Geng

N. Hiller PSI 24.6.2024

Week 25 17.-24.6.2024

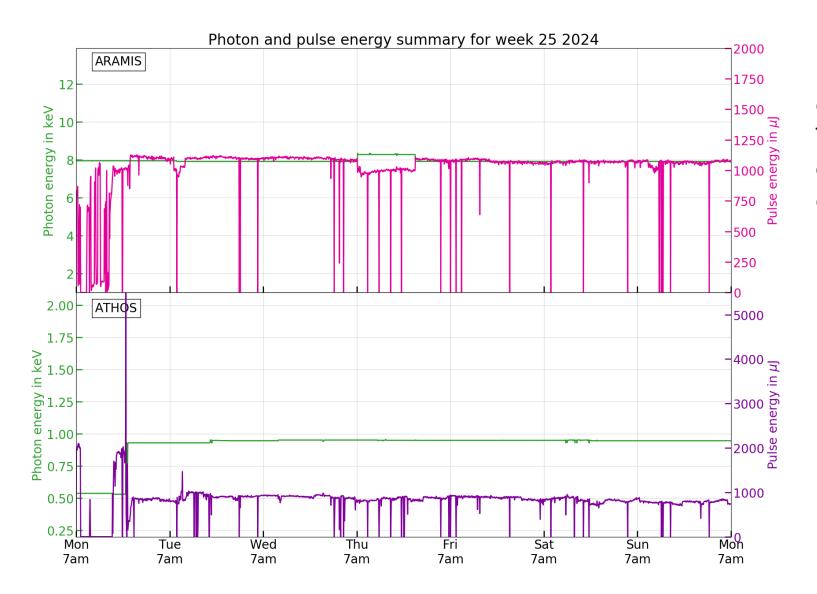


- User Operation in Bernina at 8 keV (Cristallina on Thur 8.35 keV)
- Beamline development in Furka
 930 eV LH/LV
 530 eV LV -> requested, but not used



Performance during the week





Fairly quiet week with no long downtimes.

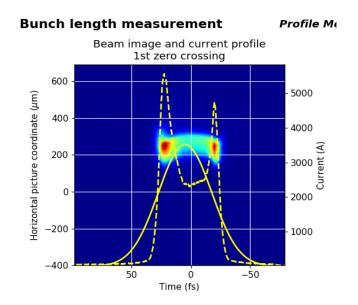
The performance was rather constant with small degradations.

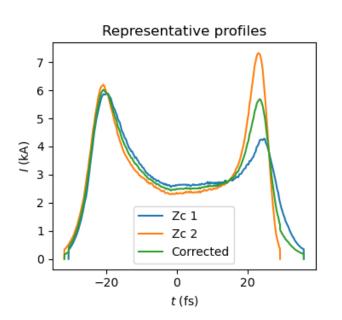
However we are below record performance in both lines.

Beam characterization



- for Aramis beam:
 - Bunch length: elog: https://elog-gfa.psi.ch/SwissFEL+commissioning+data/55707
 - FEL power profile: https://elog-gfa.psi.ch/SwissFEL+commissioning+data/55708
 - 22fs FWHM/2.35 \rightarrow ~50 fs FWHM





Issues during the week



Aramis:

- The last 4 undulator modules are not contributing at the moment. FEL
 performance is thus below record, but still very good at 1.1 mJ (8 keV), the
 record would be around 1.4 mJ
- Aramis gas detector -> GUDE for the rotary gauge switched itself off a couple of times (investigating what causes this)

Athos:

 "Jumps in performance" for Athos -> had to re-adapt BC2 compression targets frequently