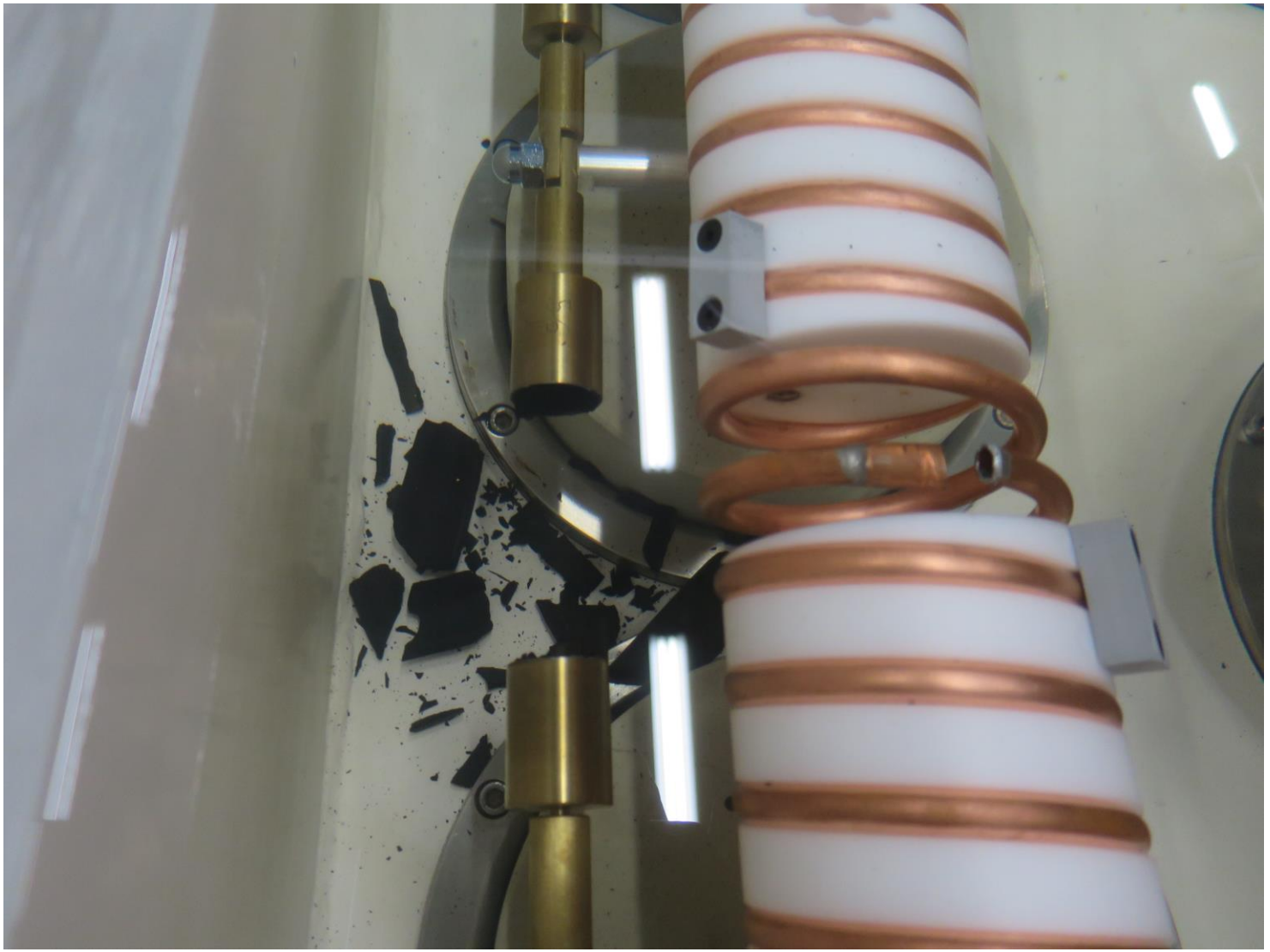
SPS machine report

FOM, 08.08.2017

SPS overview week 31

- Beam availability about 90%
- Main downtime due to issues with kickers (only main faults mentioned)
  - 5h no beam on Wednesday night due to spurious MKD triggers caused by a faulty slave card
  - 6h no beam on Friday due to damaged brazing in PFN6 of MKP injection kickers
    - First a degradation of the kicker waveform was noticed on FT beam
    - PFN6 broke down completely during LHC filling preparation at lunch time –the LHC beam could be injected with large horizontal closed orbit bump to compensate for the missing injection kicker strength and the LHC could be filled
    - After inspection ABT experts found a damaged brazing and a destroyed resistor. The repair works could be completed by the early evening.
- BCMS beam with 10% lower emittance from PS sent to LHC since Friday
  - About 1.5um measured at SPS injection for 1.18e11p/b at extraction
- Setting up of prototype Xe-cycle for FT ions well advanced

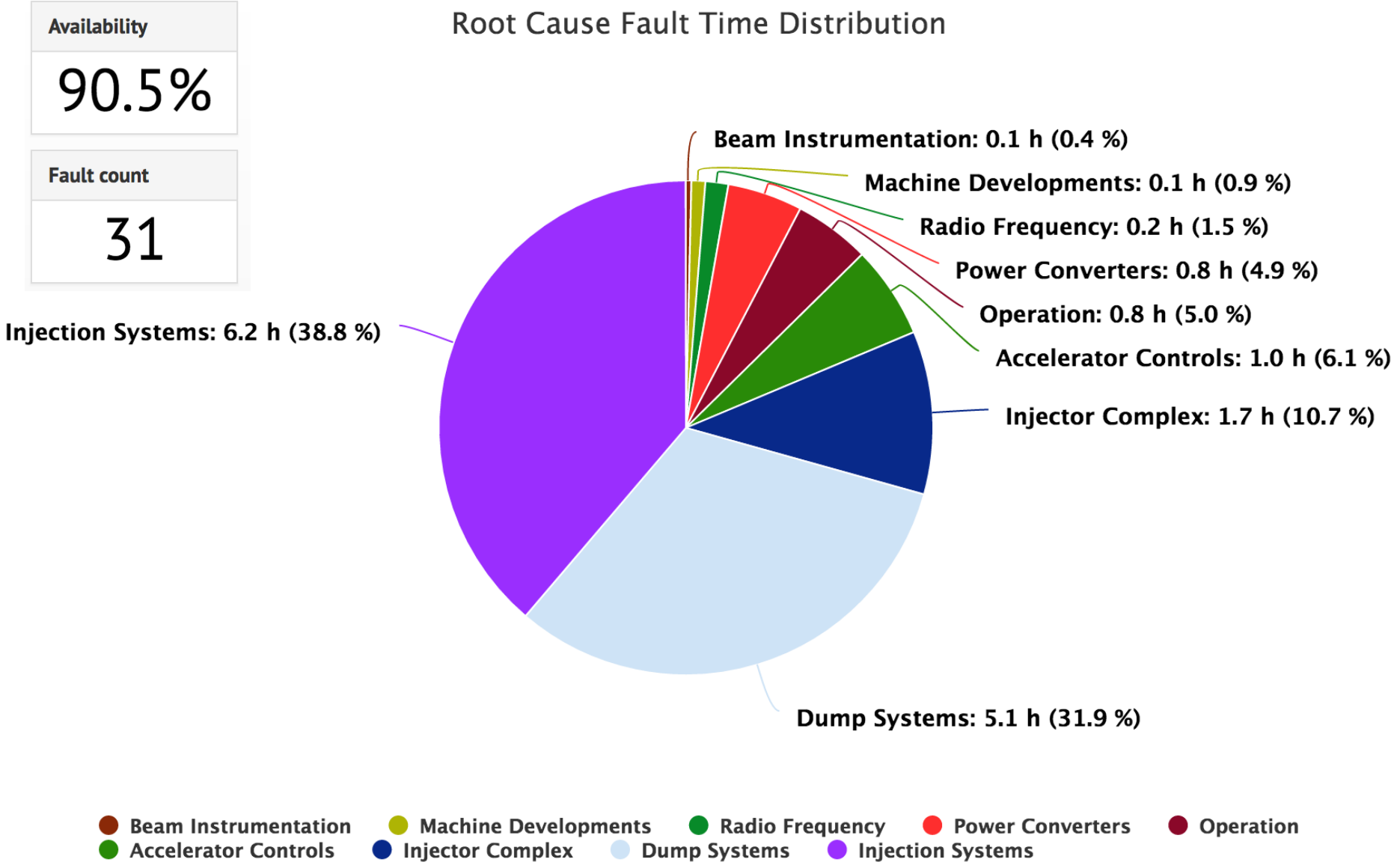
MKP PFN6 damage



SPS fault overview

Availability
90.5%

Fault count
31



Fault breakdown