

# 80 MHz Ferrite Fast Tuner: Outcome of Checkpoint Meeting (Feb. 7th)

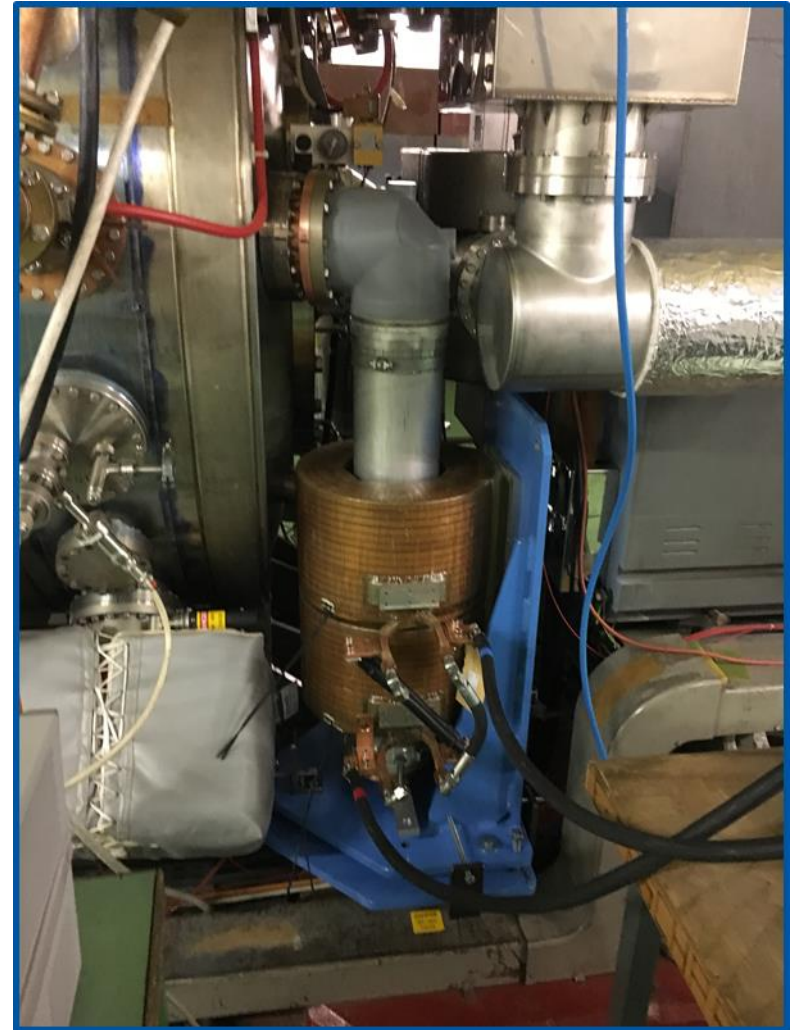
AOB:

27/02/2019

# 80 MHz Ferrite Fast Tuner

- **Goal:** Have one operational tuner by the beginning of next run!

Nominal frequency for protons	80.11 MHz
Argon	79.96 MHz
Lead	79.88 MHz



# Motivation for the Tuner

- **Beneficial for parallel proton and ion operation**
  - Only two 80 MHz cavities would be necessary for operation (instead of three)
    - Leads to reduction in beam impedance: already visible at intensities below  $2.0 \times 10^{11}$  ppb
    - Impedance contribution of third cavity lead to emittance blow along the batch after 2<sup>nd</sup> splitting (presentation of A. Lasheen\*)
- **Time planning**
  - Compatible with installation in 2019: Week 44
  - Testing of the tuners in 2020: Week 6 -11

\*<https://iopscience.iop.org/article/10.1088/1742-6596/1067/6/062018/pdf>