

AWAKE Week 14 (5-9 April 2021)

WEEK SUMMARY: Preparation for laser experiments studying behavior of ionizing laser pulse propagation through the Rb vapor source when laser is on/off-resonance with Rb

- **TAG41 accesses:** scheduled CV intervention on Electron Gun water cooling circuit
- **BB4 Elevator:** stuck between 0 and -1 with a person inside for ~1 hour, then restarted by itself. Inspection the following morning found no fault.
- **Vapor source:** warmed up to 200 C in preparation for plasma experiments
- **Laser:** installation of new oscillator (Gecco Ti:Sa) for on/off-resonance studies of ionizing laser pulse propagation through the Rb vapor source
 - Laser engineer from external manufacturer came to CERN for entire week
 - Maintenance of the laser system and additional training for spectral shaping and laser pulse compression with stretcher, compressor, and Mazzler.
- **Laser/DAQ:** Setup and debugging of diagnostic and trigger systems for laser pulse propagation experiments
 - PXI cameras, Schlieren imaging with gated camera and wavemeter, triggered USB spectrometer, energy meters
 - PXI synchronization problem under investigation with help from BE-CEM.

Next week: Start of laser on/off-resonance studies

- Giovanni Zevi Della Porta