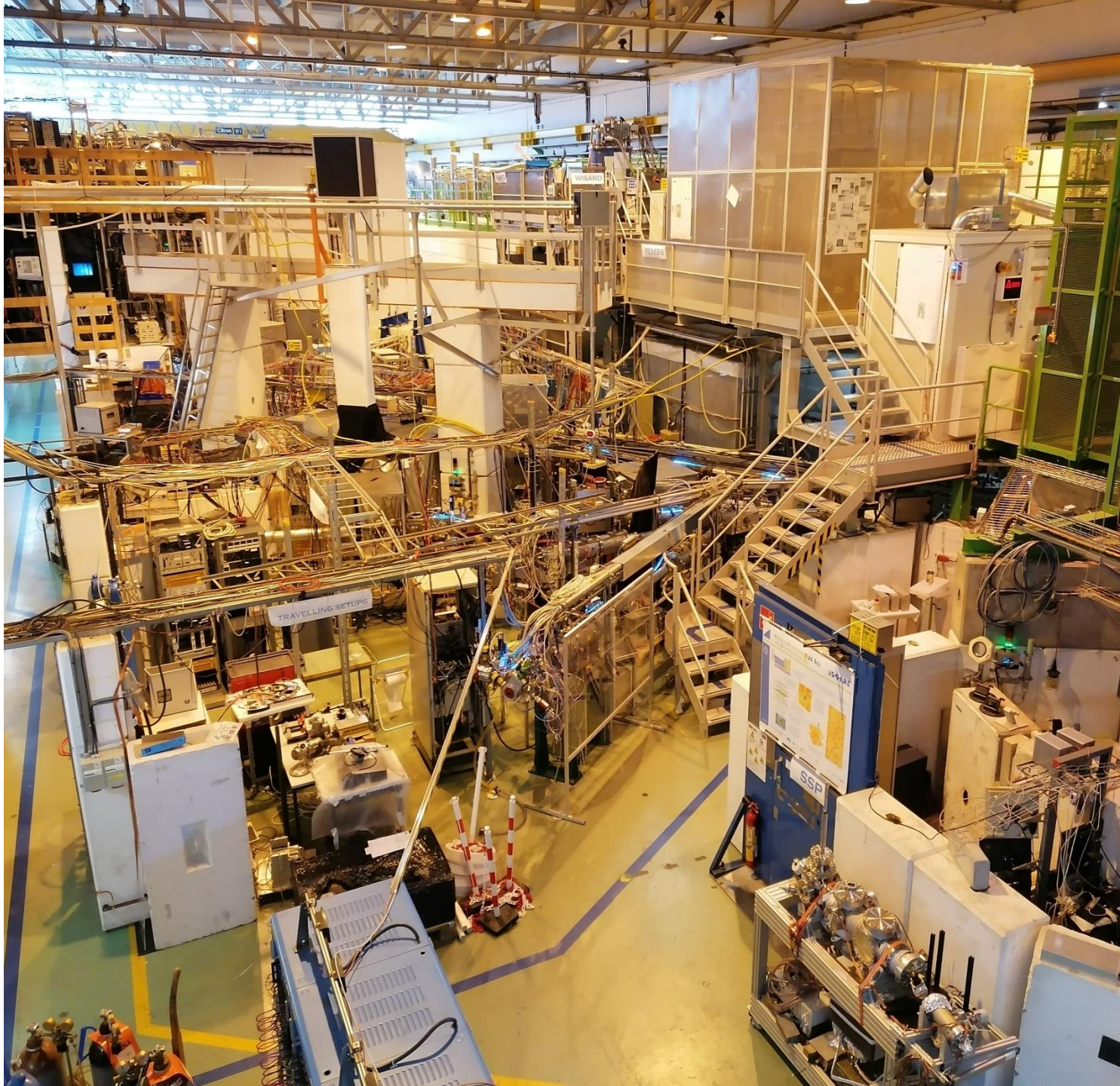
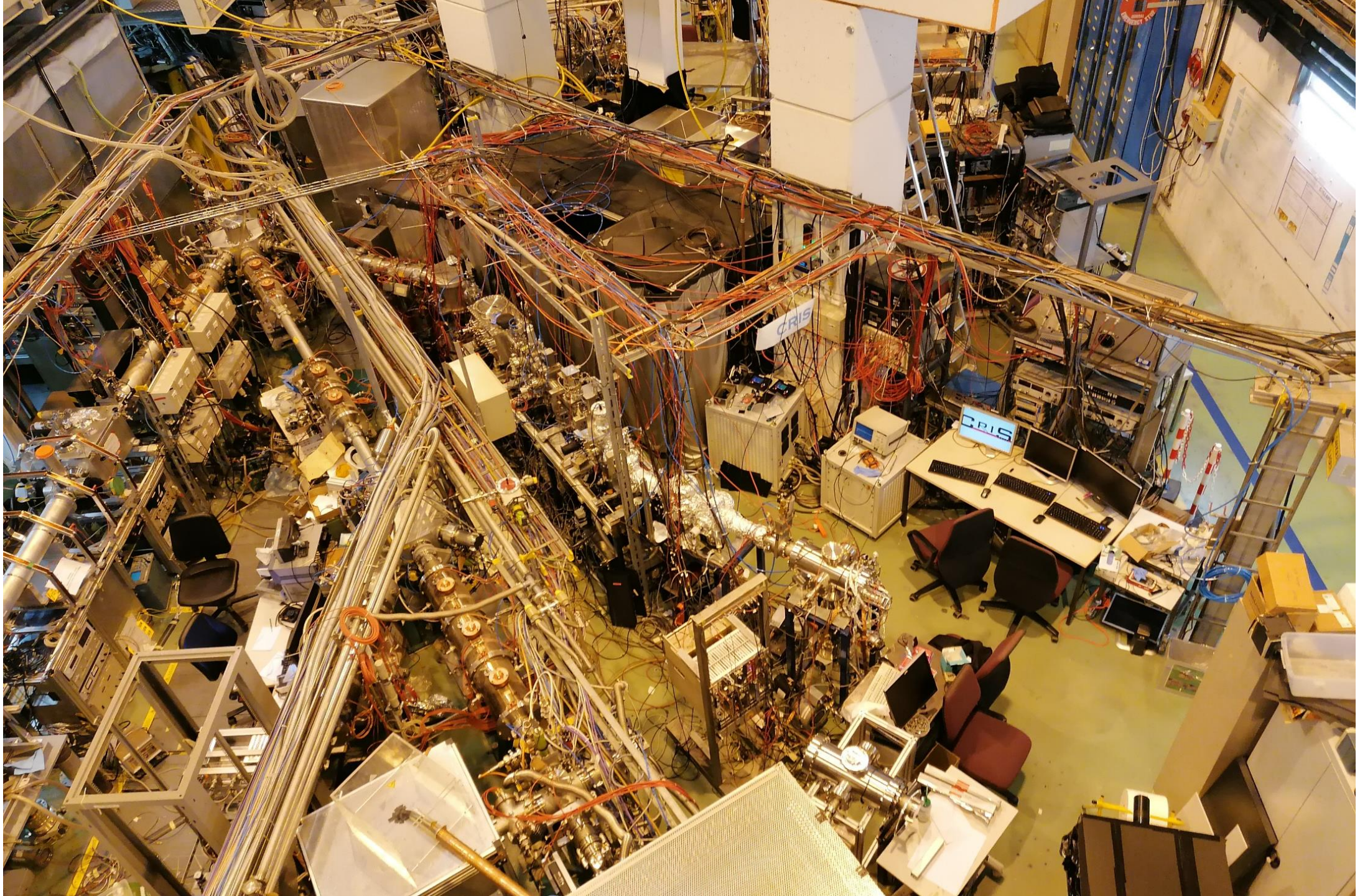
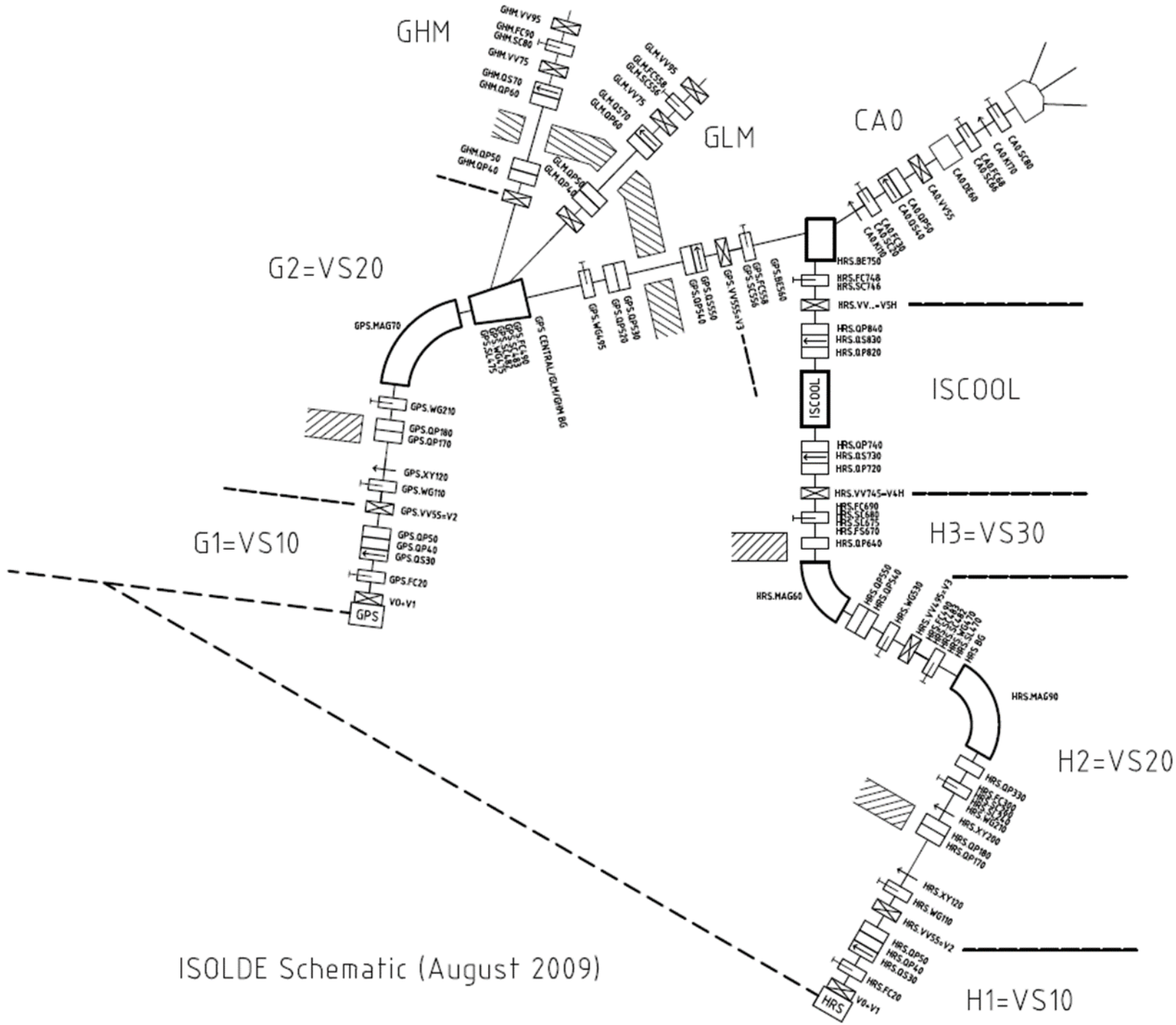
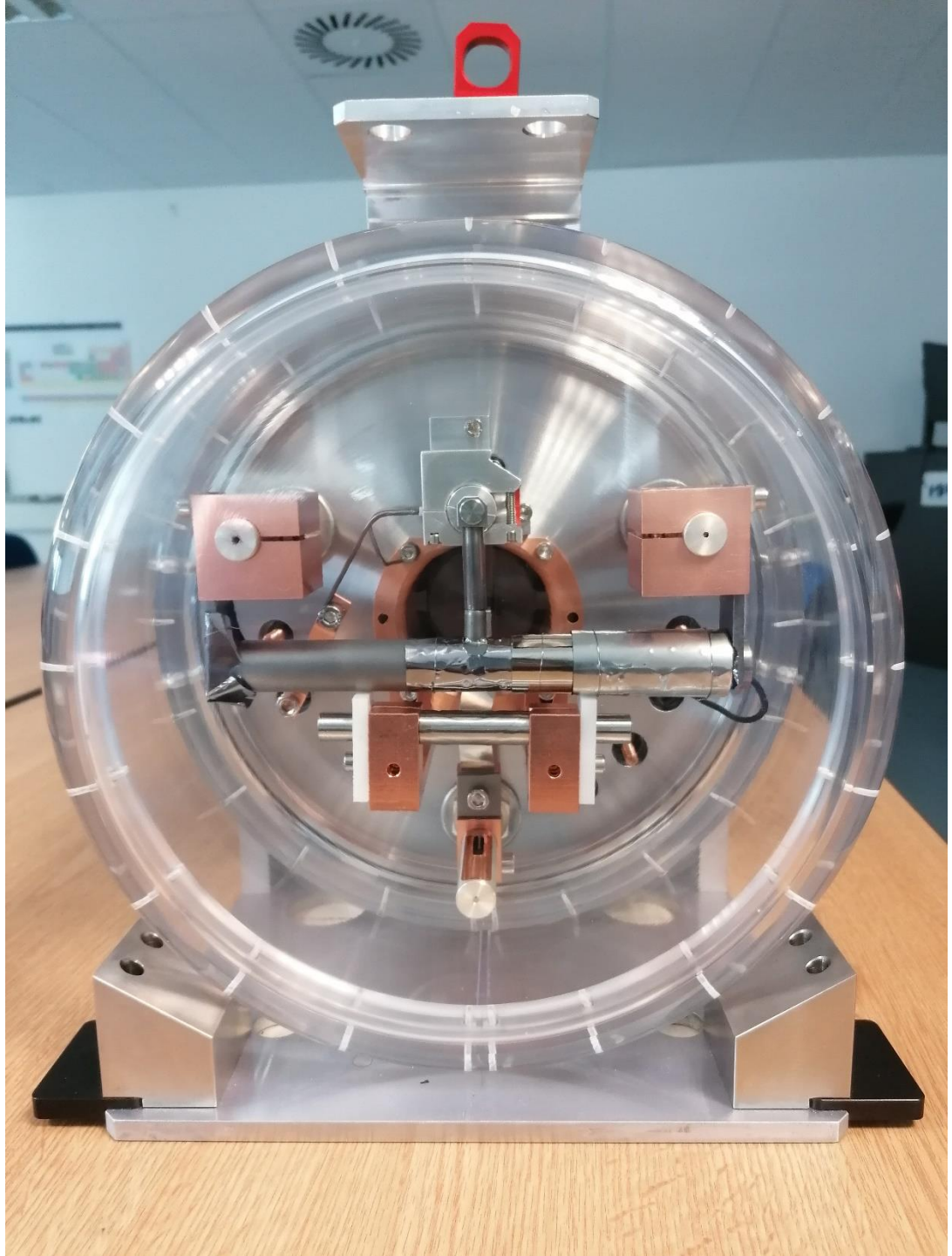
Spanish High-School Students Internship Programme 2019

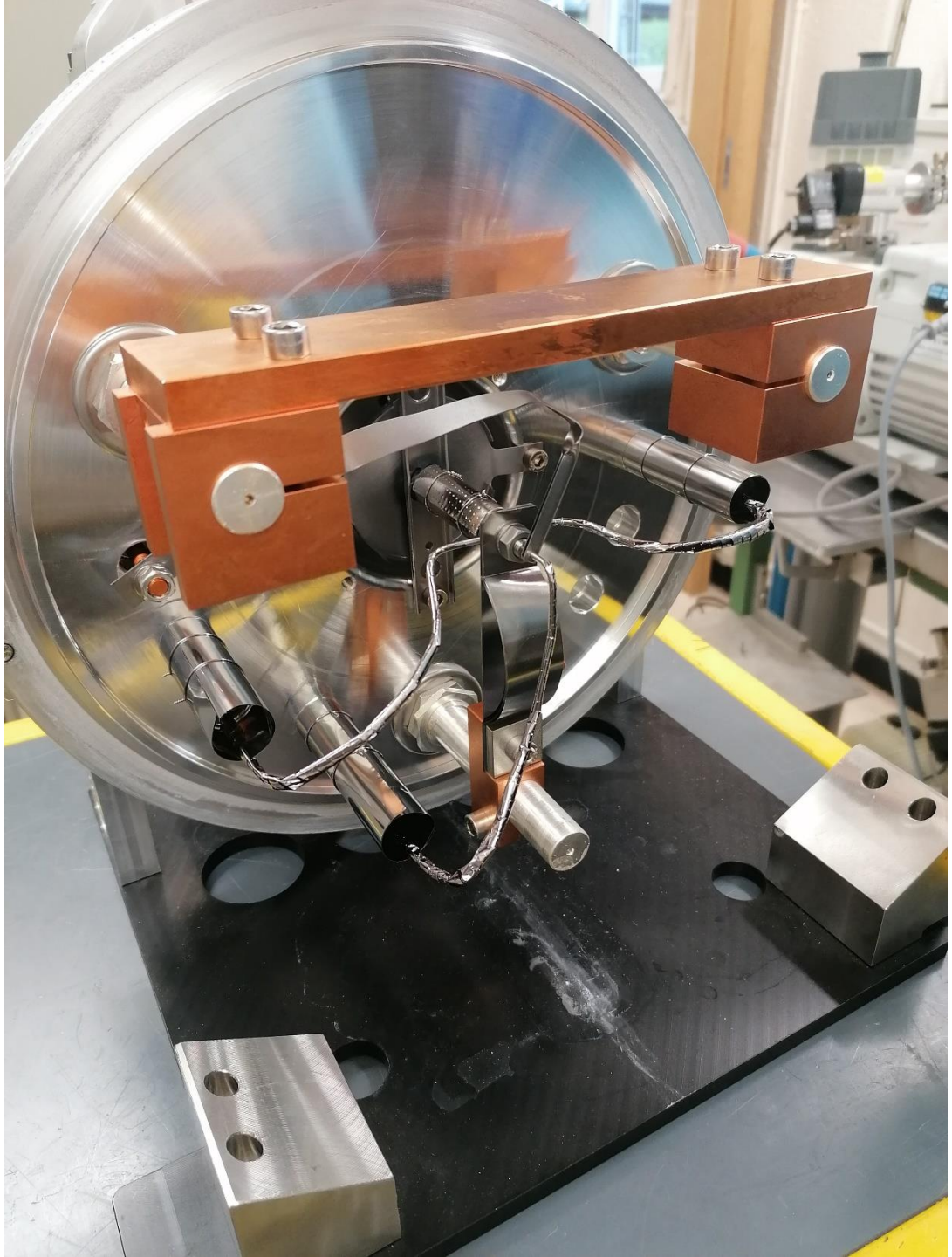
Irene Guadix Gil
Dewi Valentina Martín Wangsa




CRIS
CRIS


GHM
GLM
CA0
G2=VS20
G1=VS10
ISCOOL
H3=VS30
H2=VS20
H1=VS10
GPS
HRS
GPS.MAG70
GPS CENTRAL/GLM/GHM BG
HRS.BE750
HRS.MAG60
HRS.MAG90
HRS BG
ISCOOL
ISOLDE Schematic (August 2009)





CWO-508-ISO1
CWO-508-ISO1
Isotope Browser
CERN - AB - OP eLogbook - Viewer - Mozilla Firefox
elogbook.cern.ch/eLogbook/attach_viewer.jsp?attach_id=1983970
20190927000231.png
YHRS.BSC4820
Nuclear Physics International

Control Systems

GUI (Java)

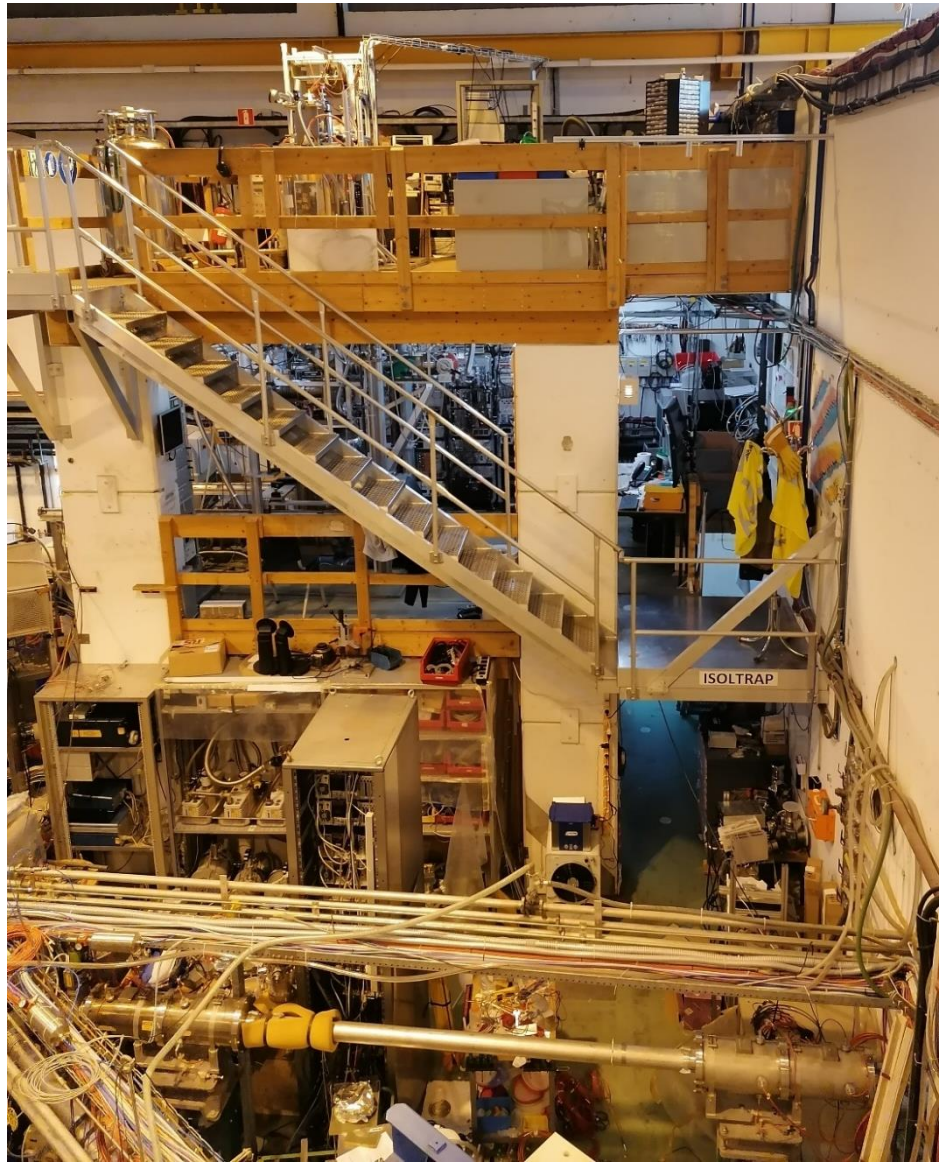
CMW (C++)

JAPC

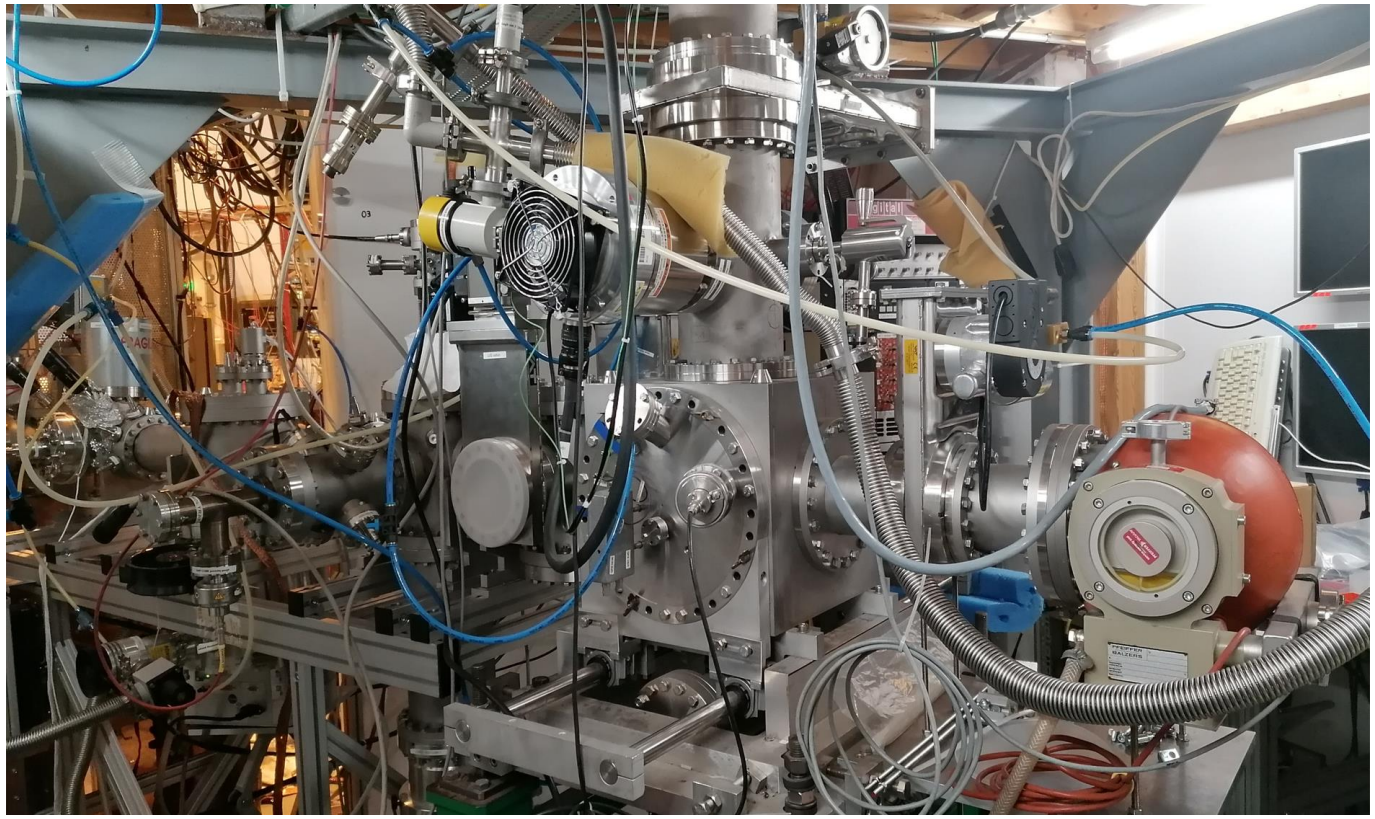
FEC (C++)

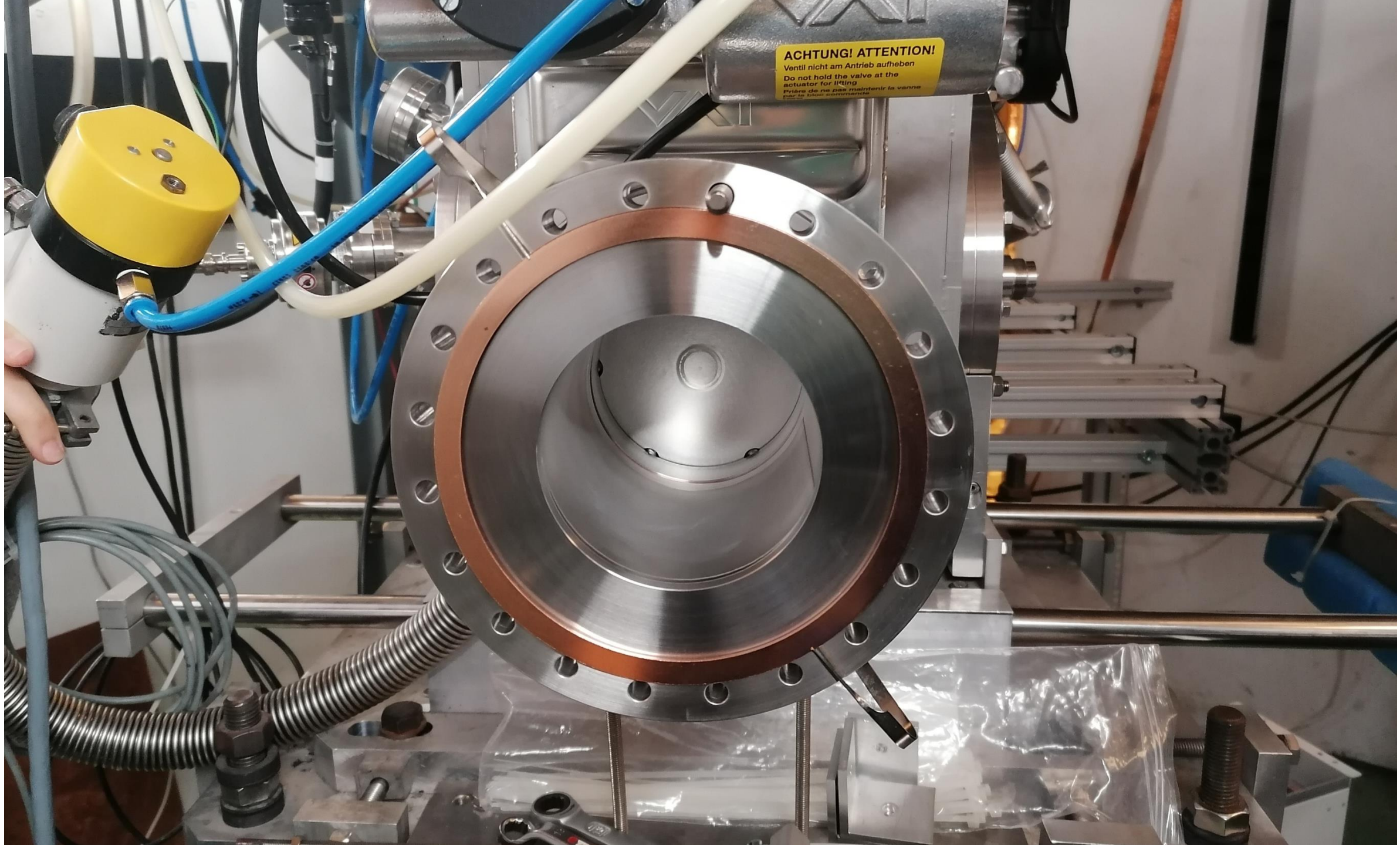
Low level software

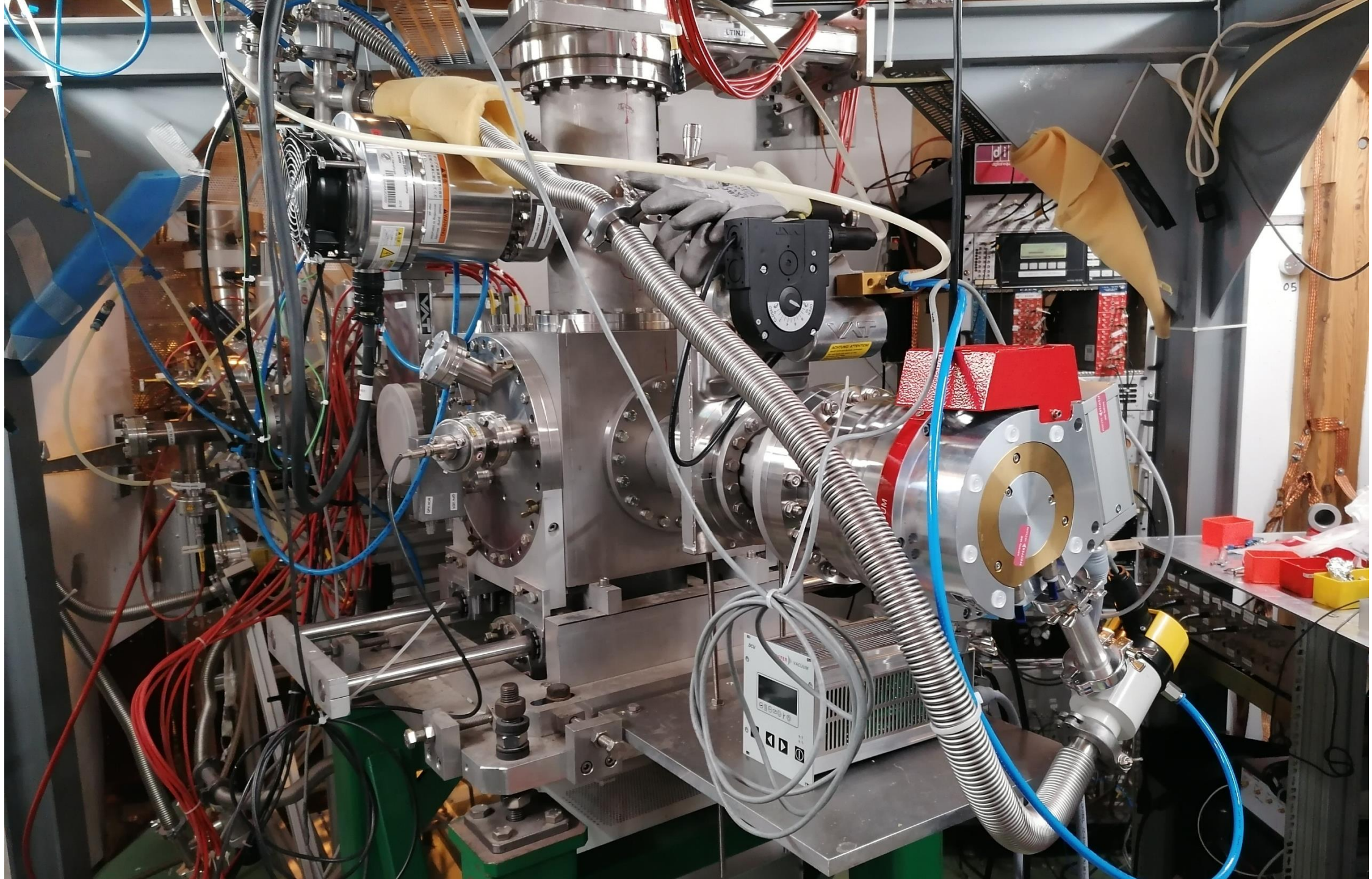
Hardware

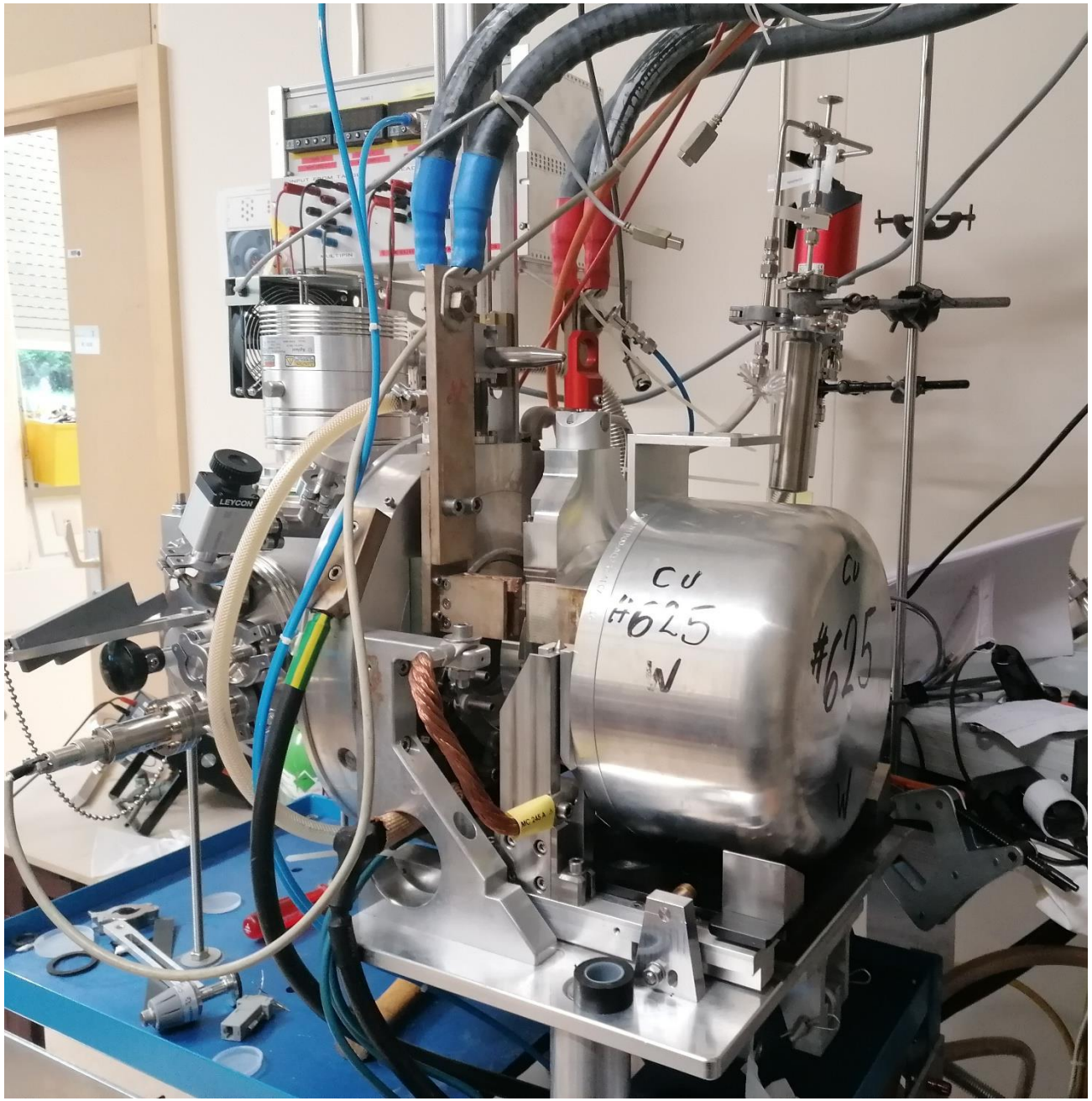


ISOLTRAP

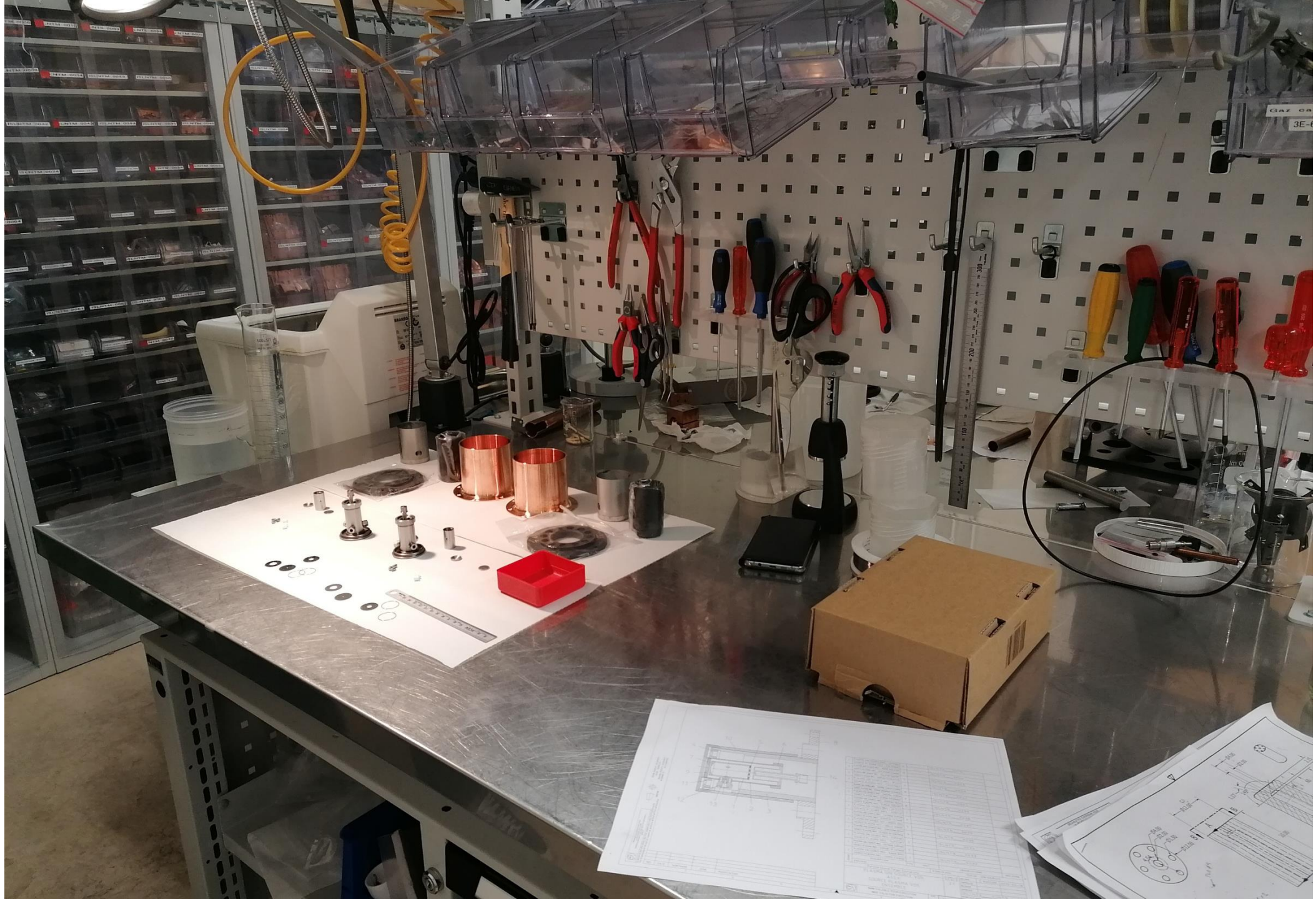


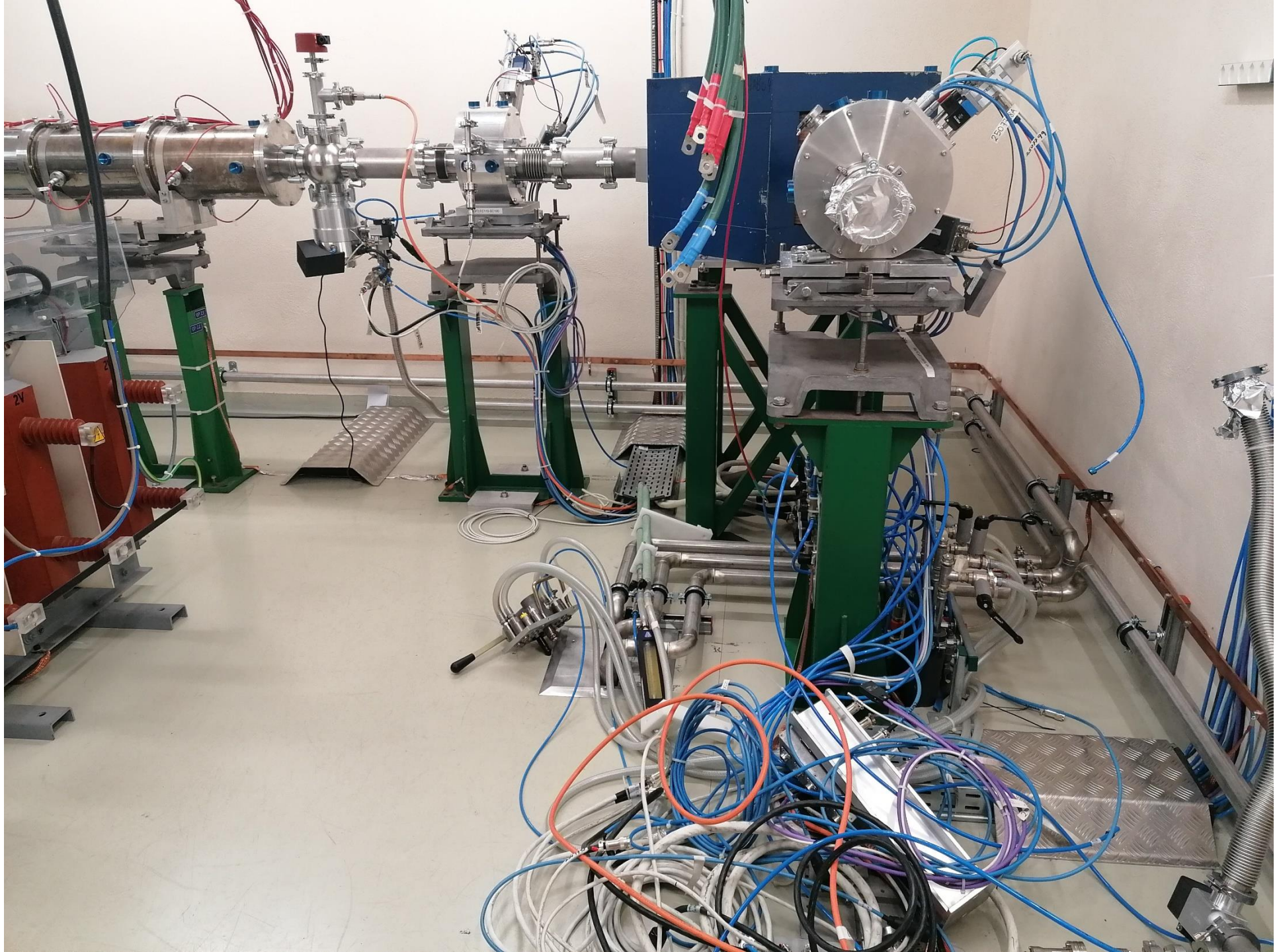

ACHTUNG! ATTENTION!
Ventil nicht am Antrieb aufheben
Do not hold the valve at the actuator for lifting
Prière de ne pas maintenir la vanne par le bloc commande

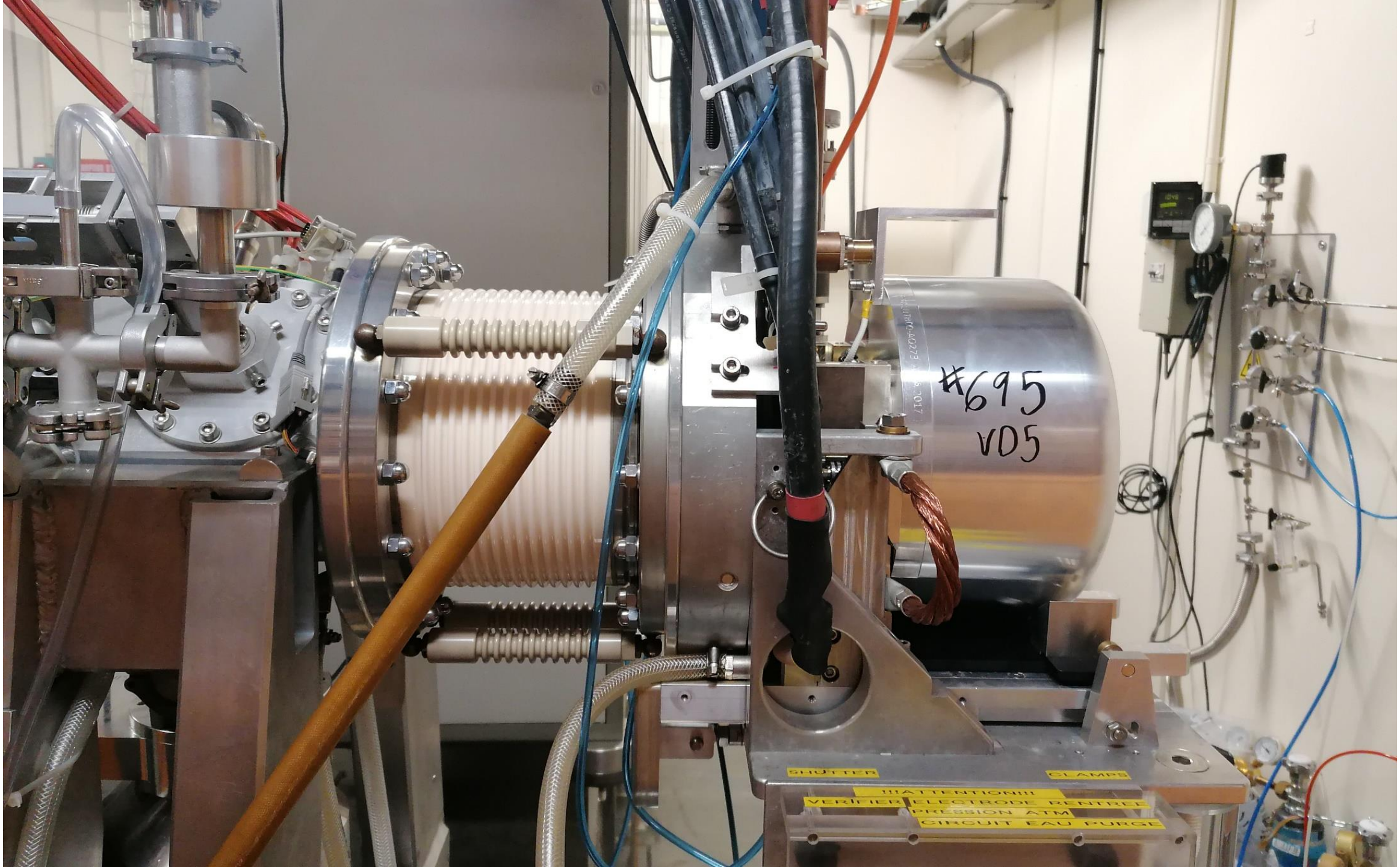


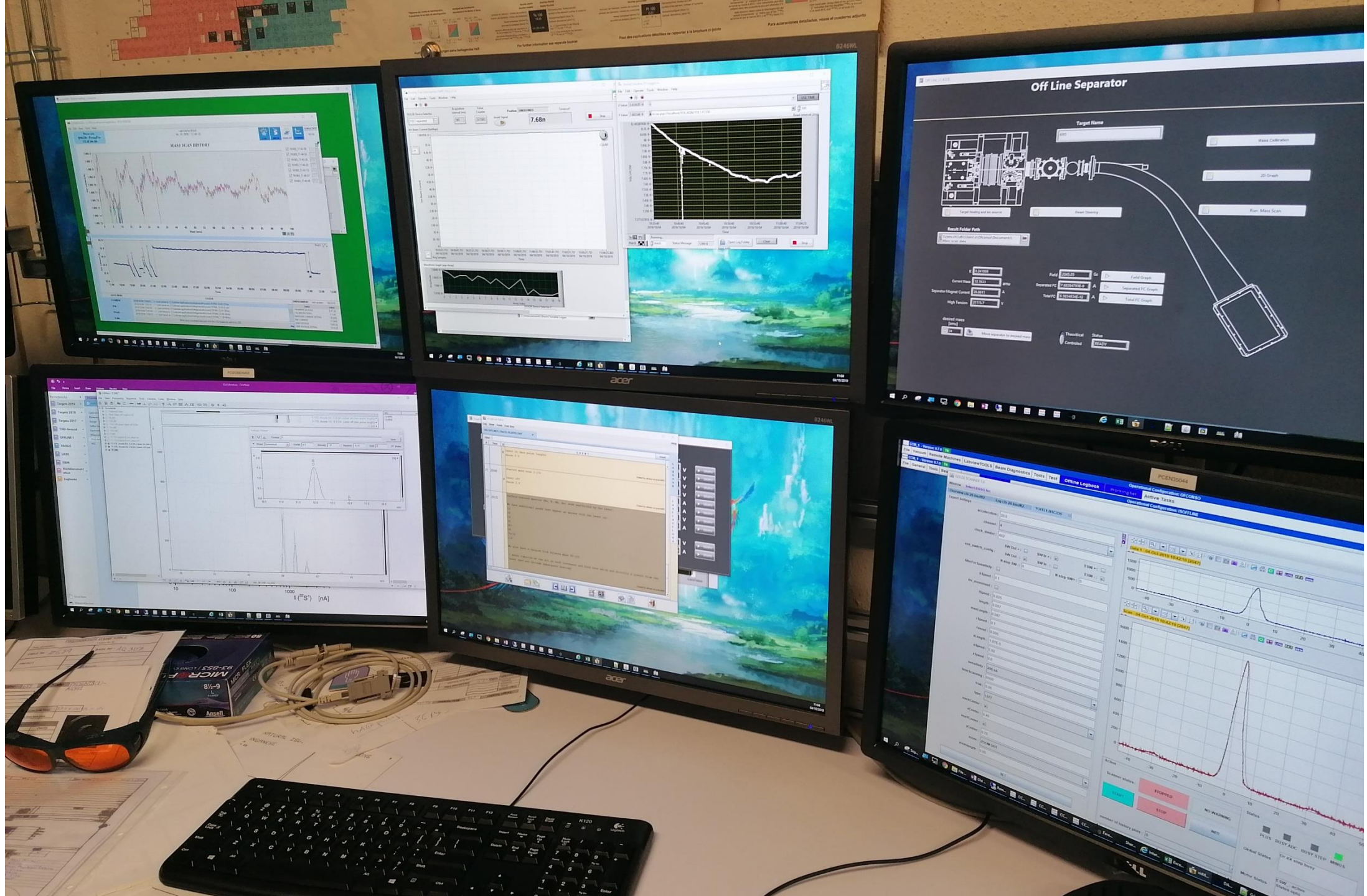

LEYCON
CU
#625
W
CU
#625
W

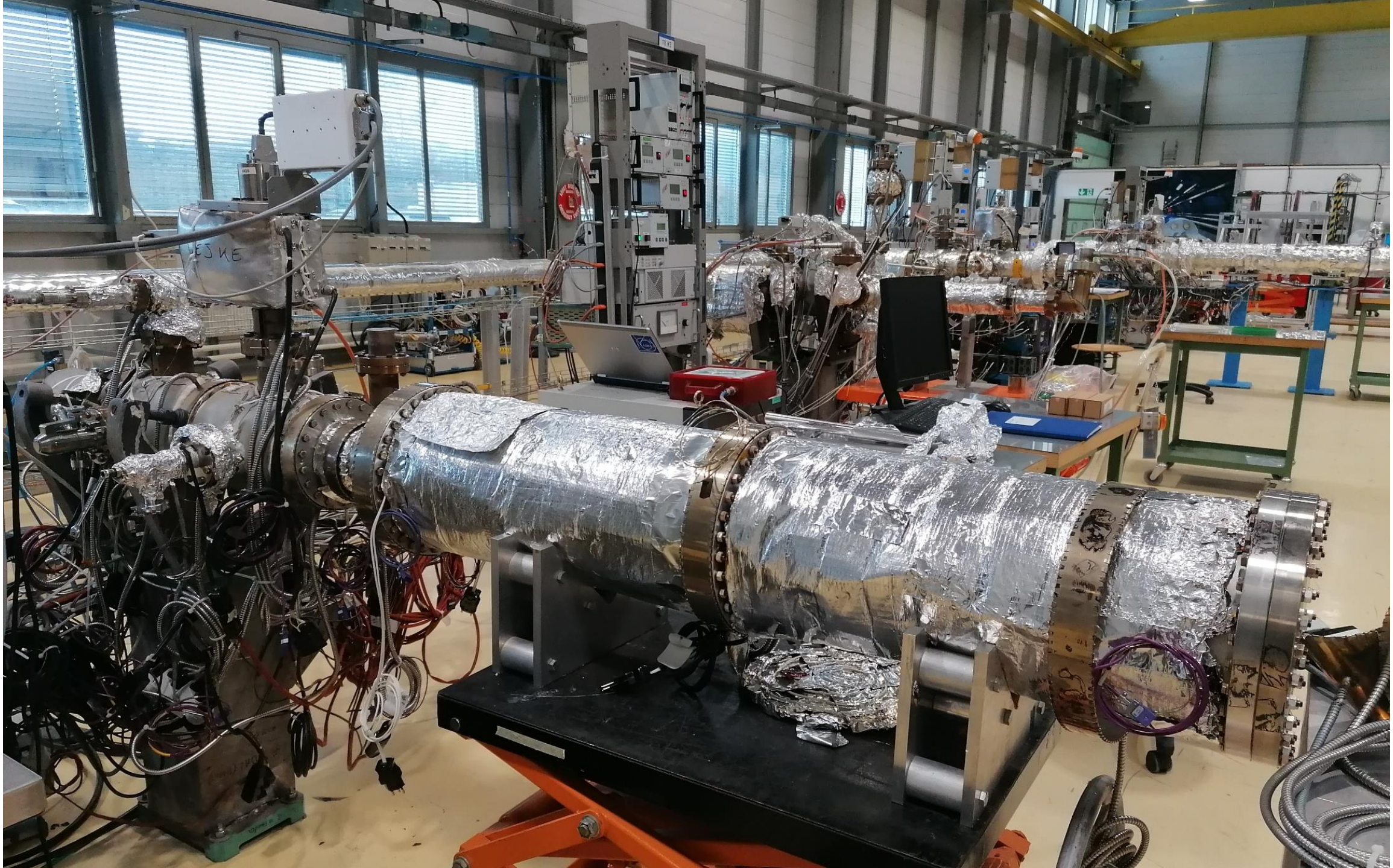
AQ290 TYPE 2
#681
BN heating
KIMTECH
#516C
VDS
TESTS
44Ti
#674
VDS





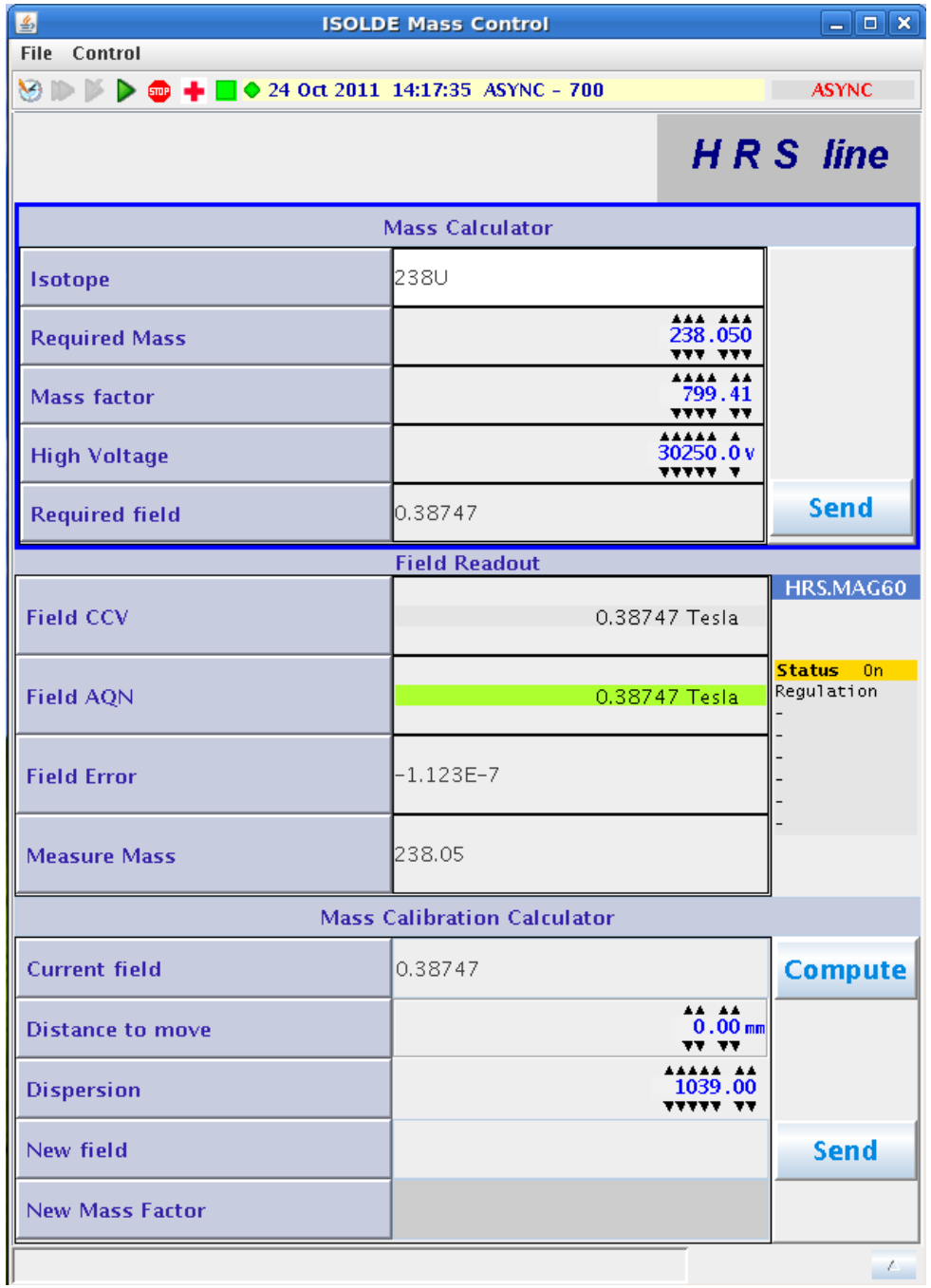

#695
VD5
SHUTTER
CLAMPS
!!!ATTENTION!!!
VERIFIER L'ELECTRODE RENTREE
PRESSION ATM
CIRCUIT EAU PURGE

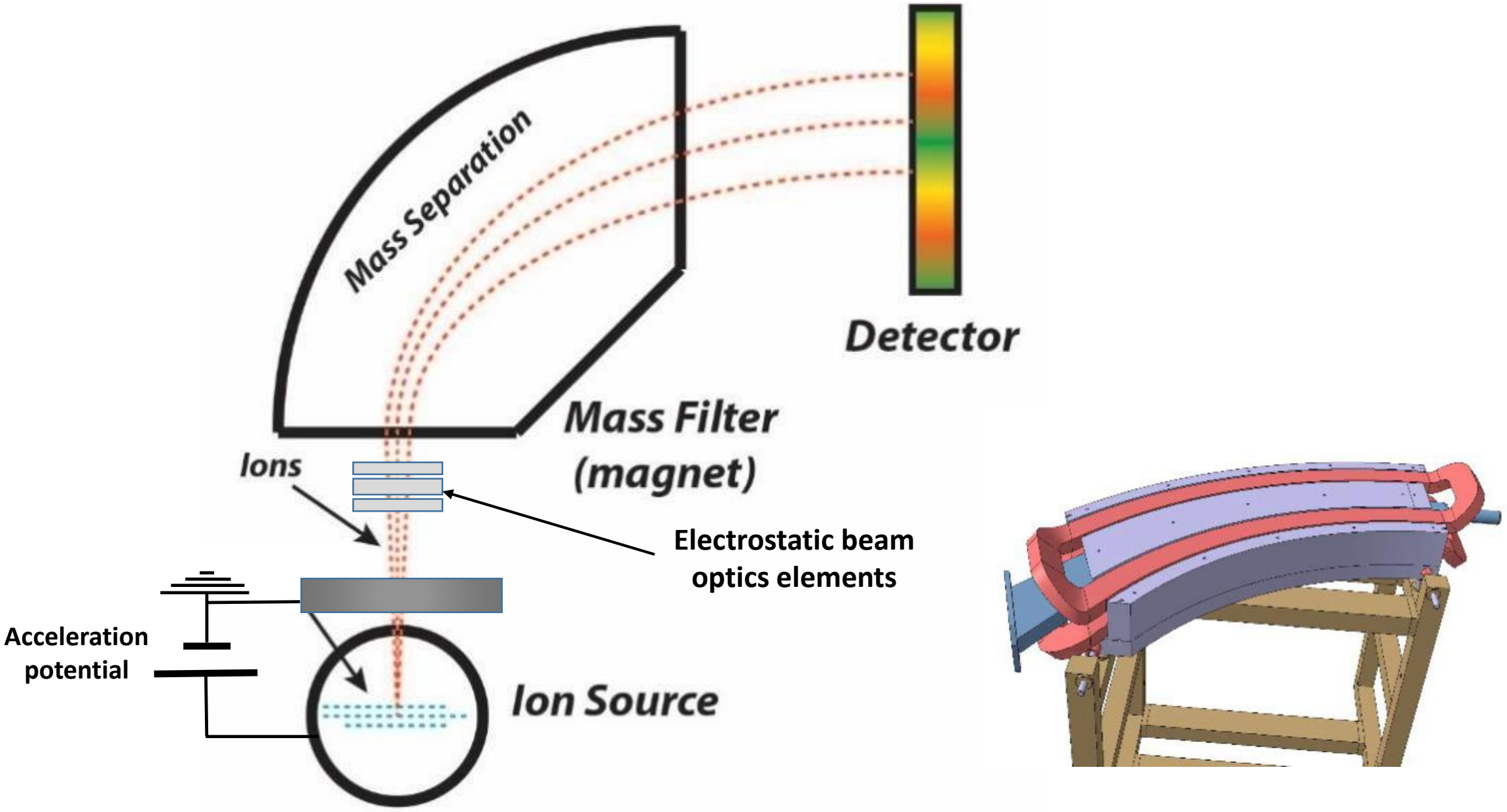

Off Line Separator
Target Name
Mass Calibration
2D Graph
Run Mass Scan
Result Folder Path
Field Graph
Separated FC Graph
Total FC Graph
Theoretical
Controlled
Status
READY
MASS SCAN HISTORY
7.68n
acer
Offline Logbook
Active Tasks
PCEN35044
Ansell



VACUUM PUMPS

OUR SEPARATOR MAGNET

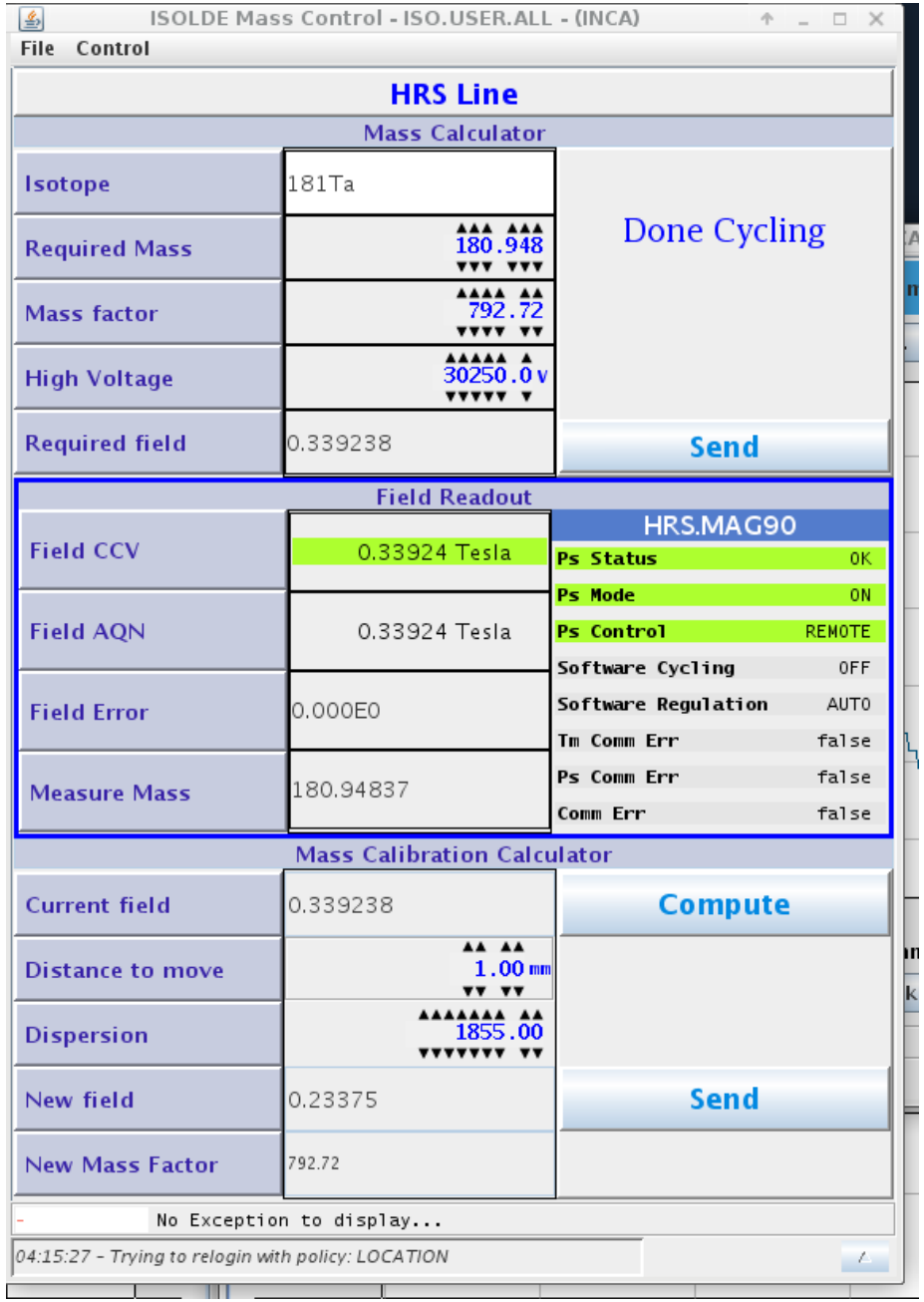


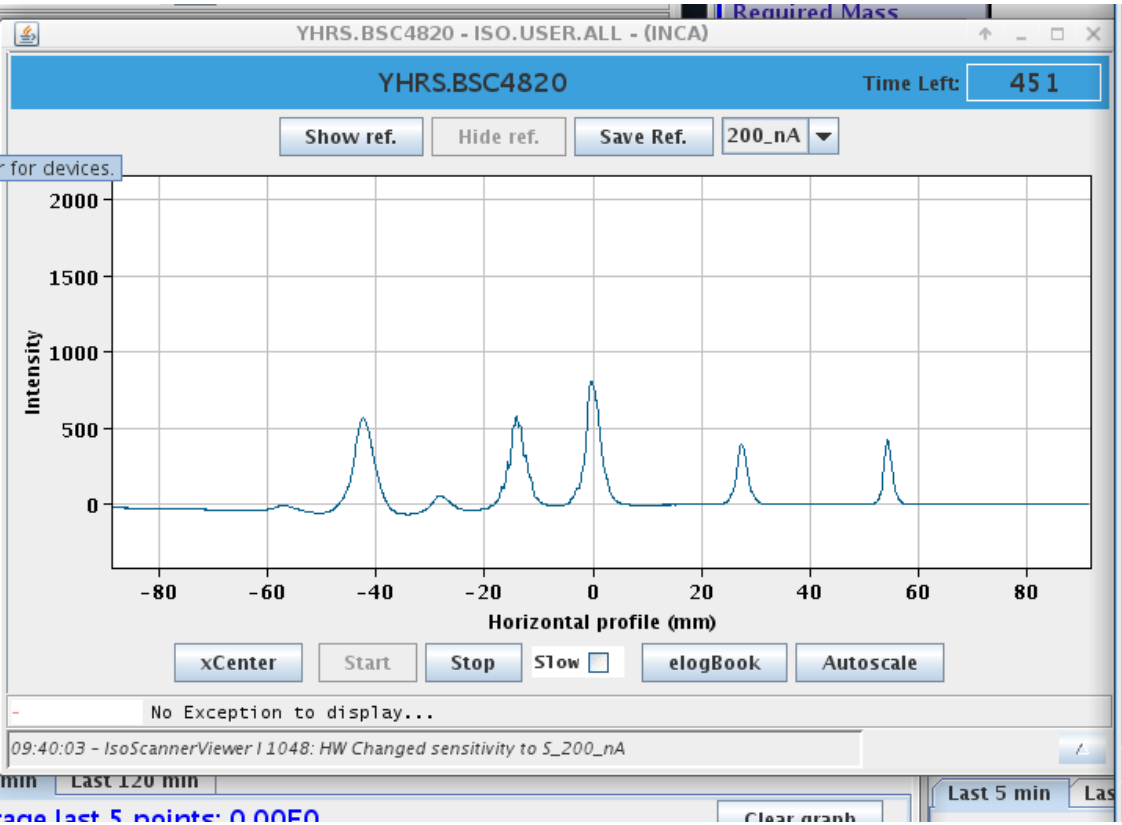

Mass Separation
Detector
Mass Filter
(magnet)
Ions
Electrostatic beam
optics elements
Acceleration
potential
Ion Source

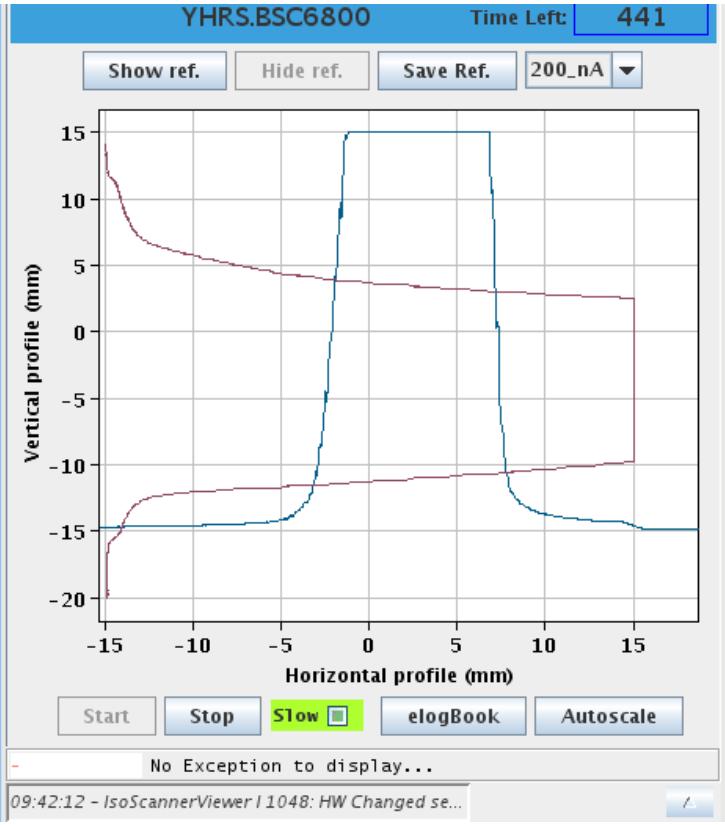
Acceleration potential: 30250V
Ion charge +1 ($1{,}602*10^{-19}$C)
Beam energy: 30250 eV
Velocity: 179603.84 m/s
Ion kinetic energy: $4.85*10^{-15}$ J
Separator magnet magnetic field: B= 0.3383 T
Isotope mass (181Ta)= 181 uma
Radius: 0.99 m

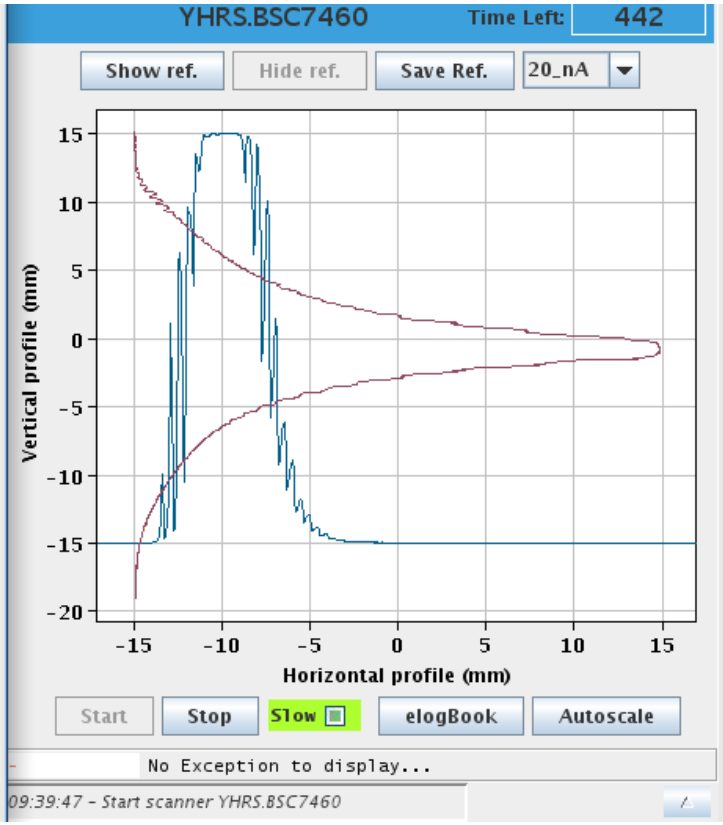
$$qVacc = \frac{1}{2} mv^2$$

$$R = mv/qB$$









Different masses out of the magnet. Each peak corresponds to a different mass. Central mass: 181 Ta.

Beam profiles

THANK YOU FOR YOUR ATTENTION