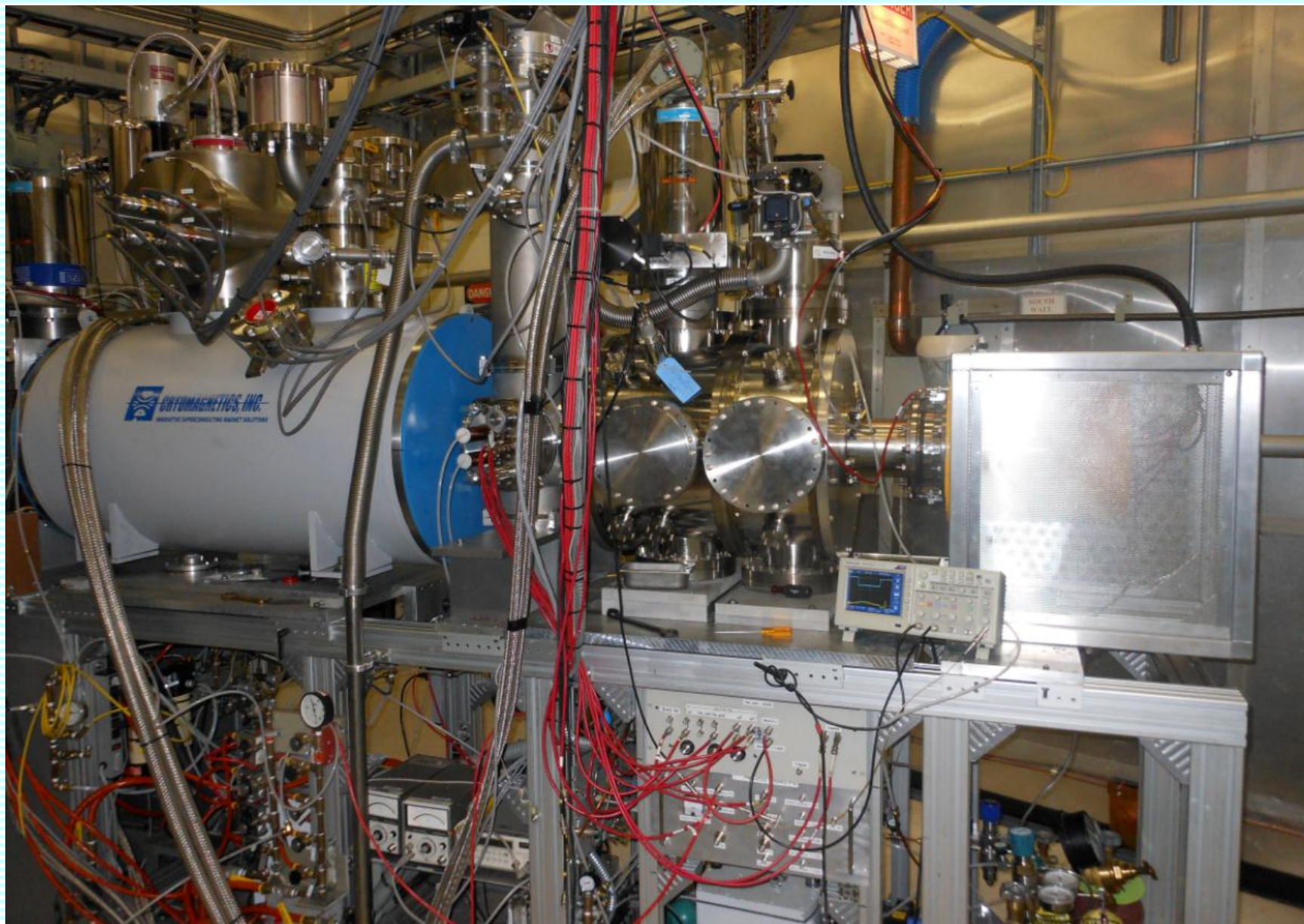


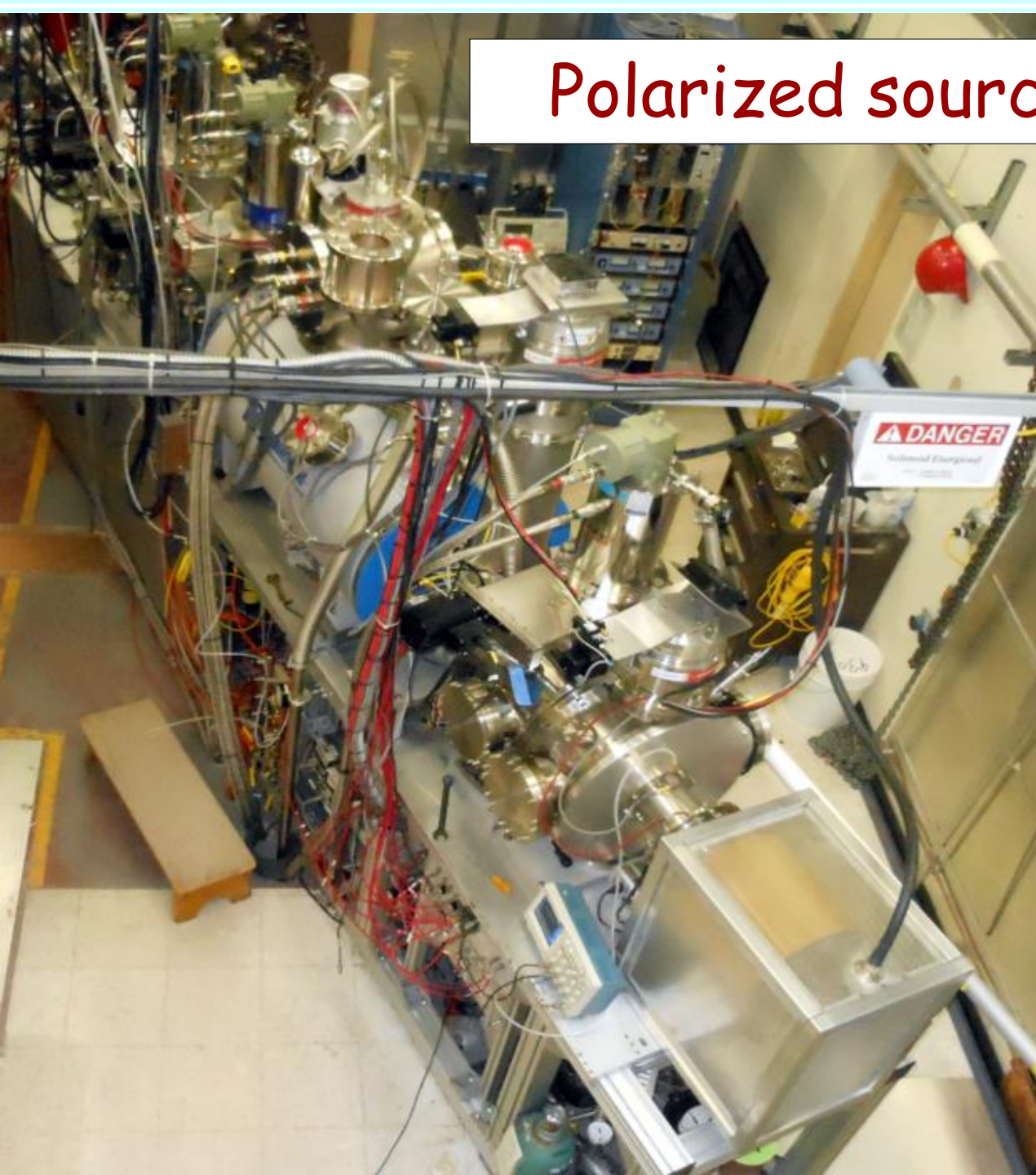
Polarized source upgrade, Febr.26, 2013



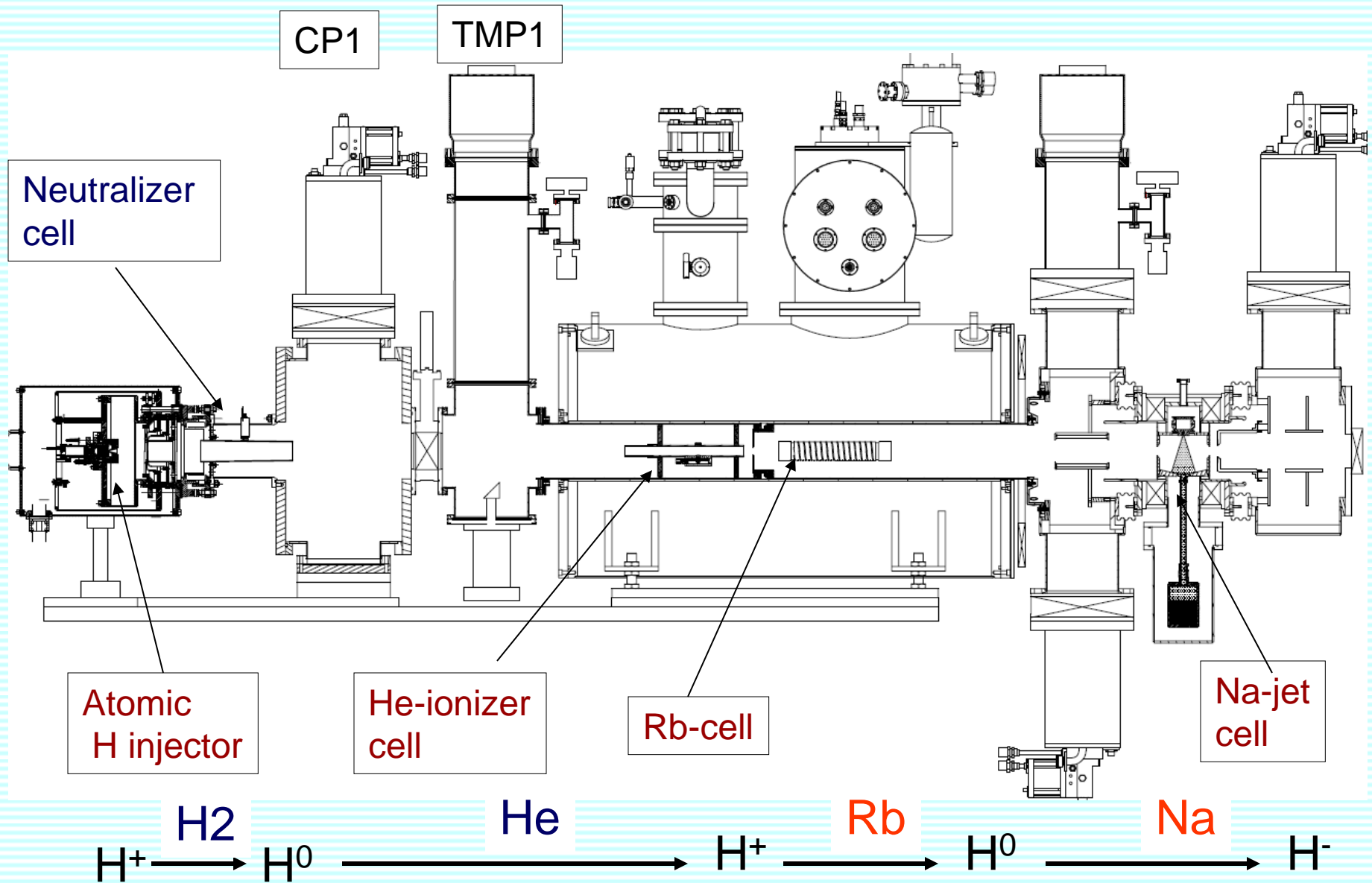
Atomic Hydrogen injector.



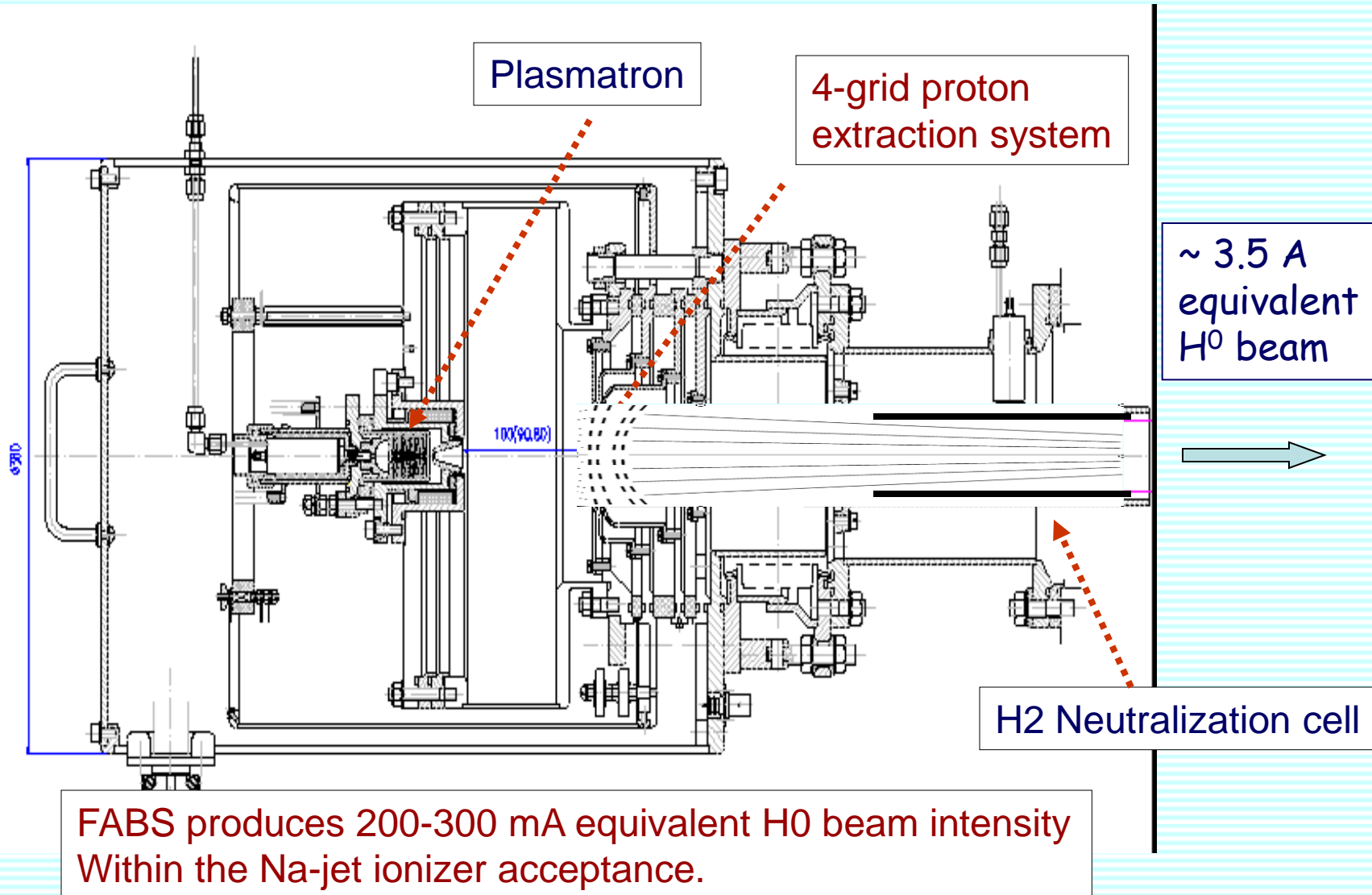
Polarized source upgrade.



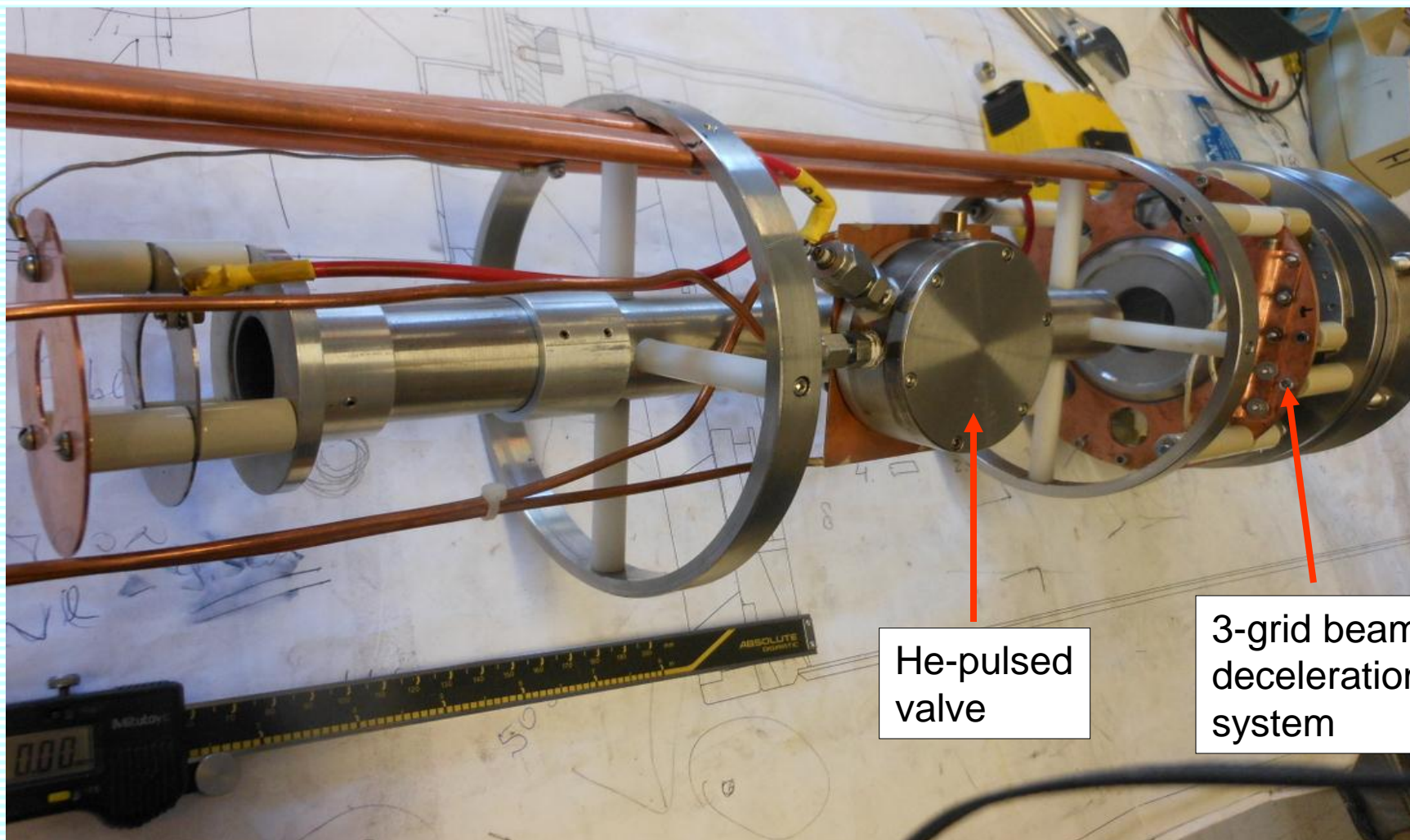
OPPIS with neutral H injector layout.



"Fast Atomic Beam Source", BINP 2011



He-ionizer cell.



He-pulsed valve

3-grid beam deceleration system

Source intensity and polarization.

- Reliable long-term operation of the source was demonstrated.
- Very high suppression of un-polarized beam component was demonstrated.
- Small beam emittance (after collimation for energy separation) and high transmission to 200 MeV.

Rb-cell, Temp., deg C	86	91	95	100
Linac Current, μA	210	250	310	360
Booster Input $\times 10^{11}$	3.5	4.0	5.6	6.5
AGS late	2.3	2.8		
Pol. %, at 200 MeV	83-84	82	80	76