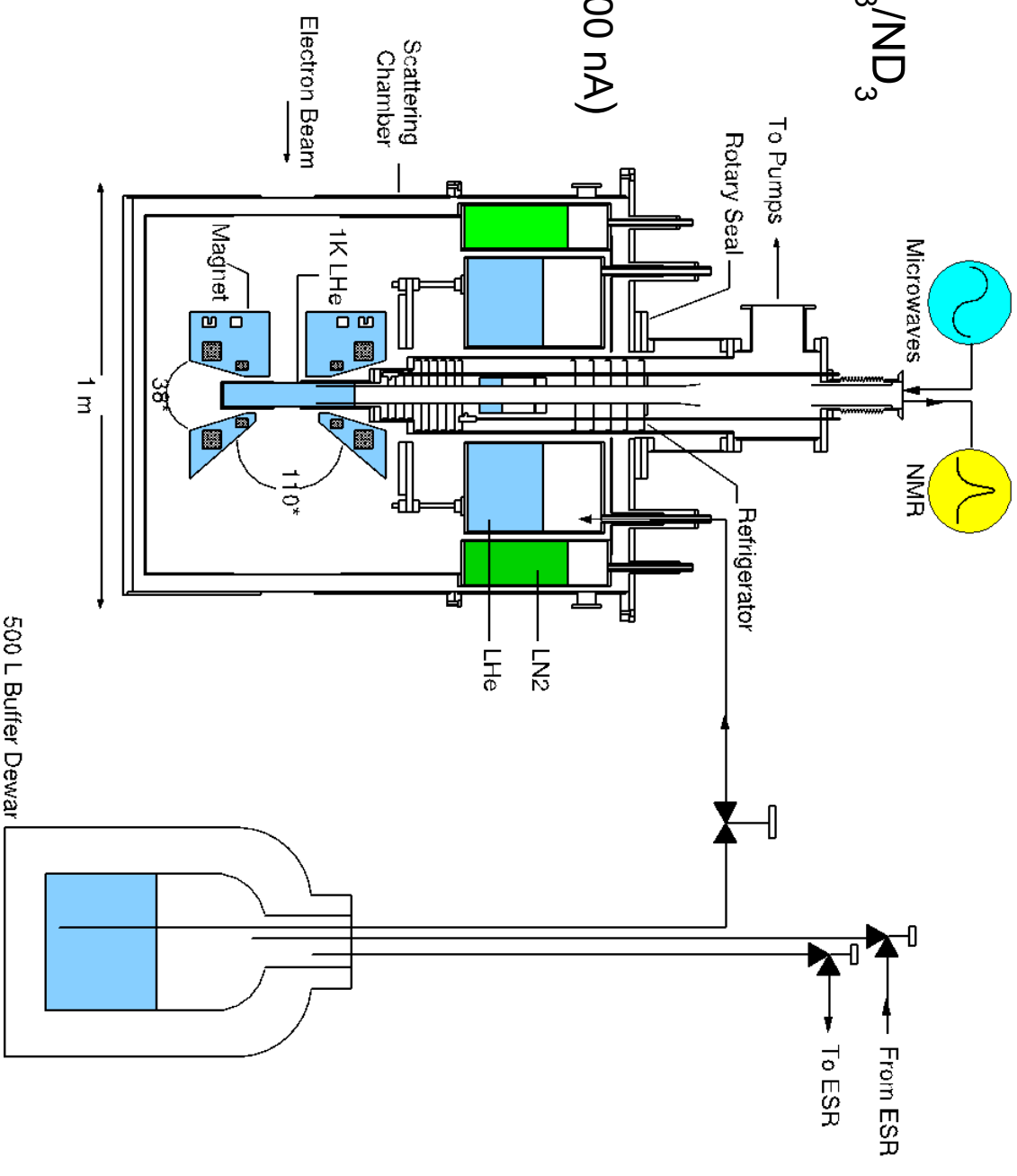


JLab/UVa Polarized Proton Target

- Used multiple times at SLAC and JLab Hall C
- Last used in Hall A in 2012 (g2p/Gep)
- Replace original magnet (inoperable) with Hall B magnet
- Major upgrade to nearly every system component
 - New magnet *suspension* system
 - New magnet *rotation* system
 - New 1 K refrigerator
 - New/refurbished/rebuilt pumping system
 - New ASME-compliant quench relief
 - New sample insert (2 NH₃ + 3 background samples)
 - New insert motion mechanism
 - New cryo lines

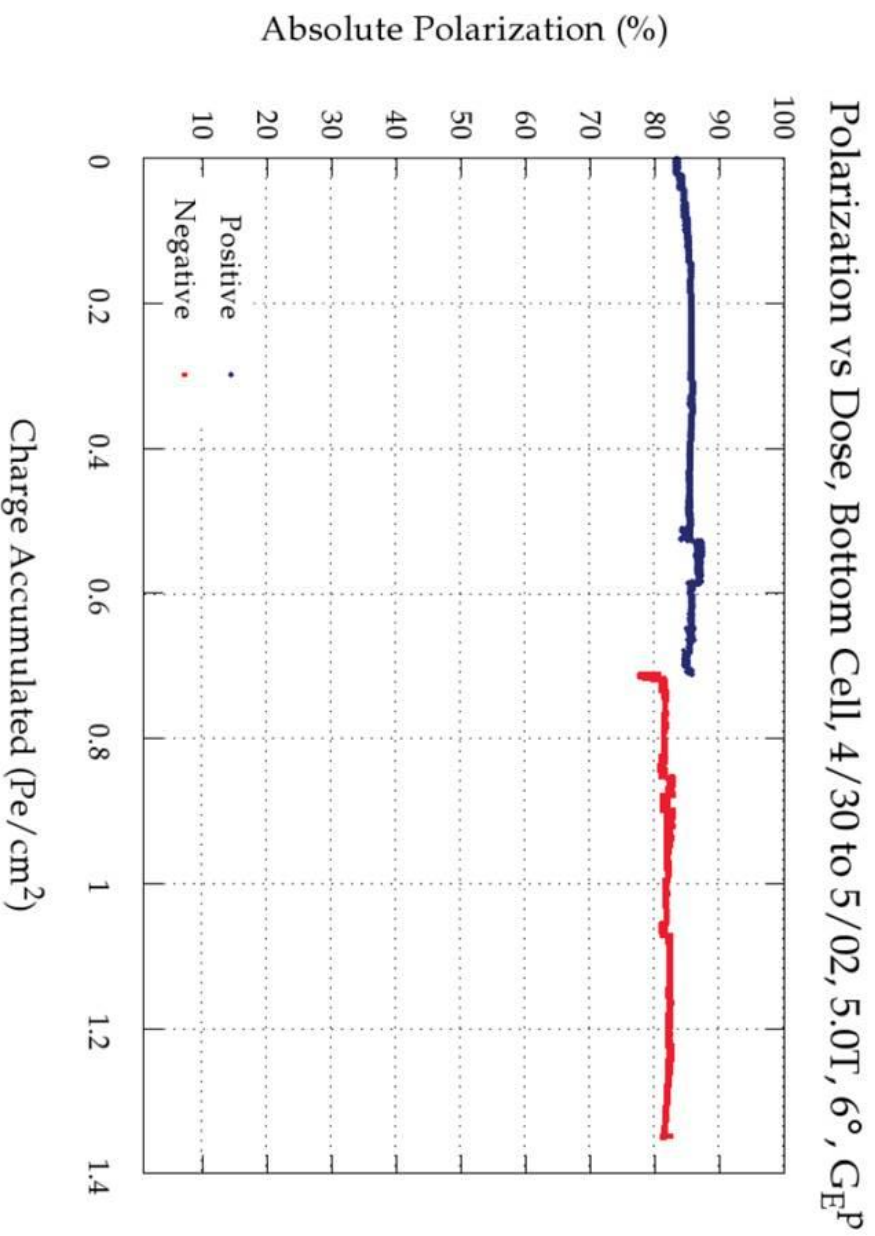
JLab/UVa Polarized Proton Target

- Dynamically Polarized NH_3/ND_3
- 5 tesla, 1 kelvin
- $P_p \approx 90\%$, $P_d \approx 40\%$
- $L \approx 10^{35}$ protons/cm²/s (100 nA)



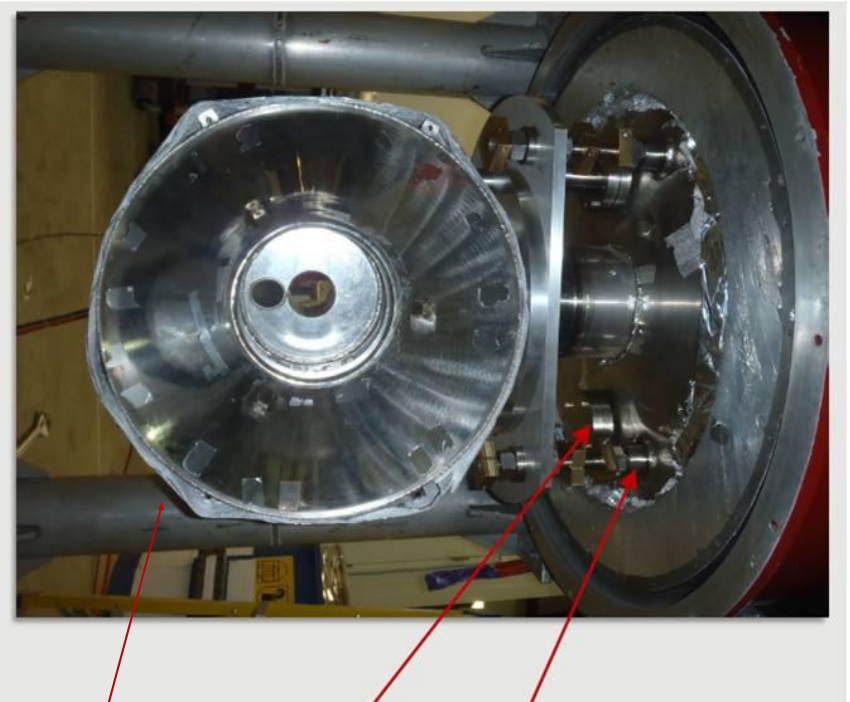
JLab/UVa Polarized Proton Target

- Performance during g2p/Gep was exceptional
 - Highly reliable
 - High average polarization



JLab/UVa Polarized Proton Target

- G2p/GeP: Hall B Magnet was utilized in place of original, inoperable magnet
- Suspension system used for g2p/GeP will simplify integration of the SOLID transverse magnet



Suspension/Alignment bracket

ConFlat flanges replace indium seals for LHe service

5 T magnet from Hall B polarized target