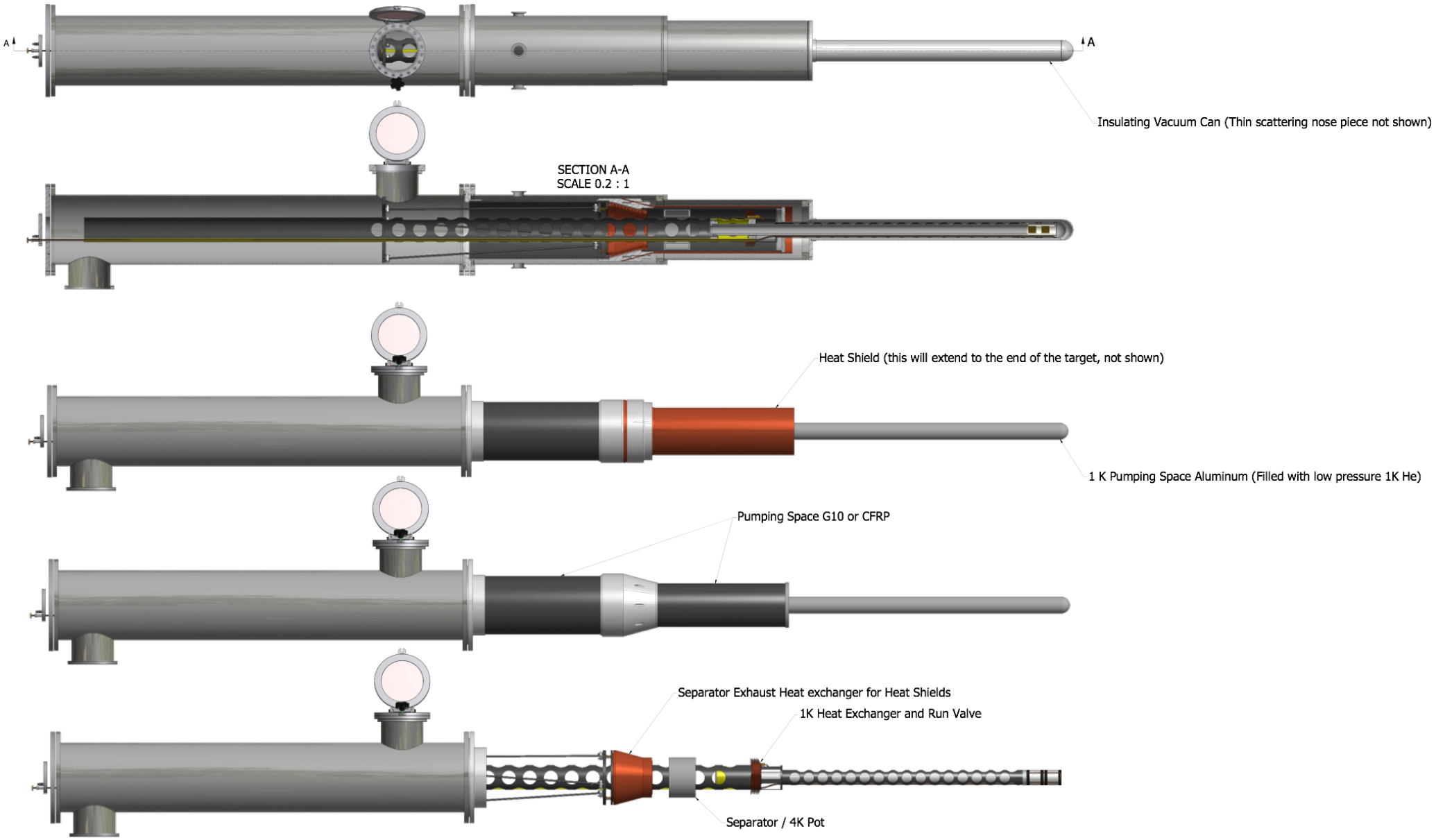
RUN GROUP C

Sebastian Kuhn, Old Dominion University

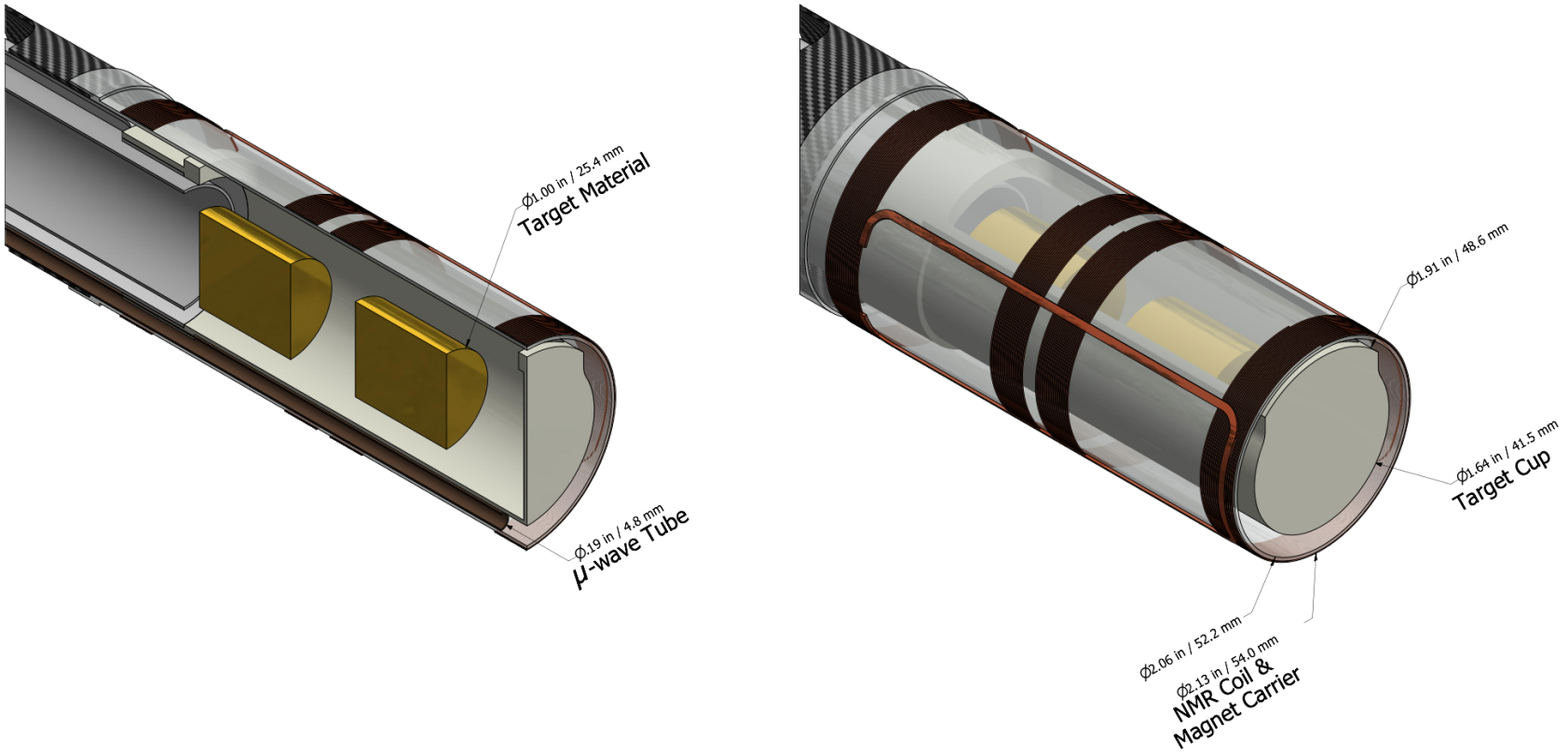
What is run group C?

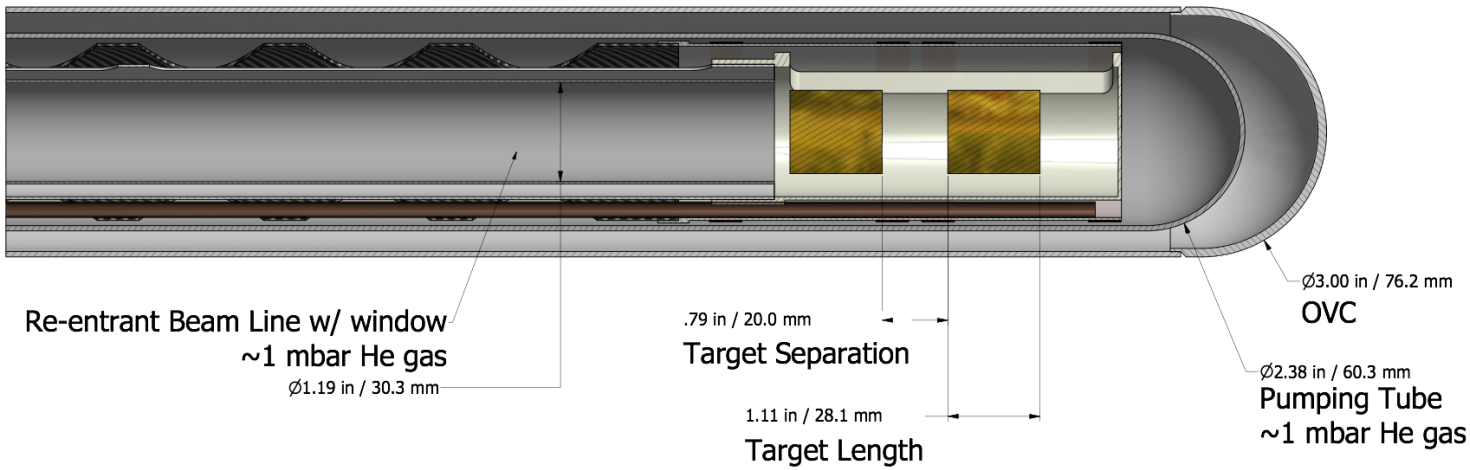
- **Longitudinally polarized proton (NH_3) and deuteron (ND_3)**
- **Approved Experiments: E12-06-109 ("EG12"; rating: A, 25d p, 45d d, 10d aux); E12-06-119(b) (p DVCS, A, 120d); E12-07-107 (π SIDIS, A-, 103d), E12-09-007(b) (PDFs from K, A-, 80d); E12-09-009 (K SIDIS, B+, 103d); PR12-15-004 (n DVCS, C2, 65d d)**
- **Runtime so far: 120 days NH_3 (RG Ca) + 65 days on ND_3 (RG Cb)**
- **PAC44 considering additional 68 days on ND3 (RG M=Cb+; 50d no FT + 10d w/ FT + 8d aux)**
- **Presently on the schedule: 60d RG Ca, 35d RG Cb 2019-20**

POLARIZED TARGET STATUS I



POLARIZED TARGET STATUS II





TO DO LIST – NEED RESPONSIBLE PEOPLE:

- Raster system (speed, shape, amplitude/range, position of magnets, driver, readout/calibration)
- Møller polarimeter system (readiness; optimize running, accuracy)
- rest of beam line (BMs, harps, lumi, steering)
- Møller shield (with and without FT; integrate with rastering)
- Downstream: FC acceptance?
- Solenoid field map
- full implementation of polarized target into GEMC
- Full background simulation
- Full simulation of rates, acceptances, resolution, vertex-reconstruction (-> dilution), including backgrounds, systematic errors (e.g., beam-helicity tracking efficiency due to DSA in Møller scattering)
- Run plan (2.2 GeV? 6.6/8.8 GeV? In/outbending? ancillary runs? optimized target operation – polarization reversal, anneal, exchange…?)
- Geometry, integration, design drawings, readiness review, CALCOM