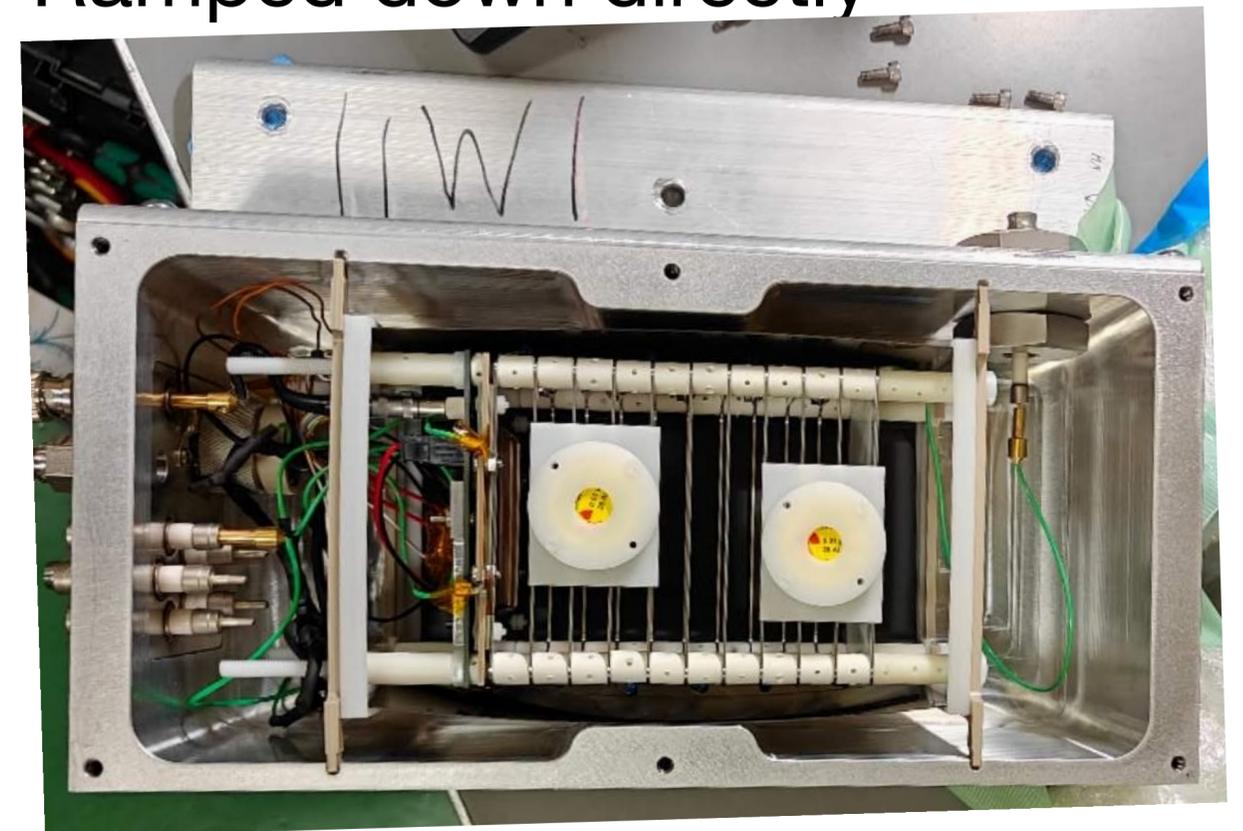


# July 17, 2025

## Qingyuan Liu

### ■ IR work summary (~3.5h):

- Connected all cables to liwi -> 50% gas flow for 10 minutes -> Observed reasonable HV currents during ramping up -> Ramped down directly
- Moved Po-210 sources from Humu to liwi
- Connected all cables to liwi again
- Set gas flow to 50% for 3 hours
- Ramped up HV to 6500/2100 V
  - ▶ Got reasonable currents 5.75/59.36  $\mu\text{A}$
- DAQ test
  - ▶ Internal trigger worked
  - ▶ External trigger failed as before



# July 17, 2025

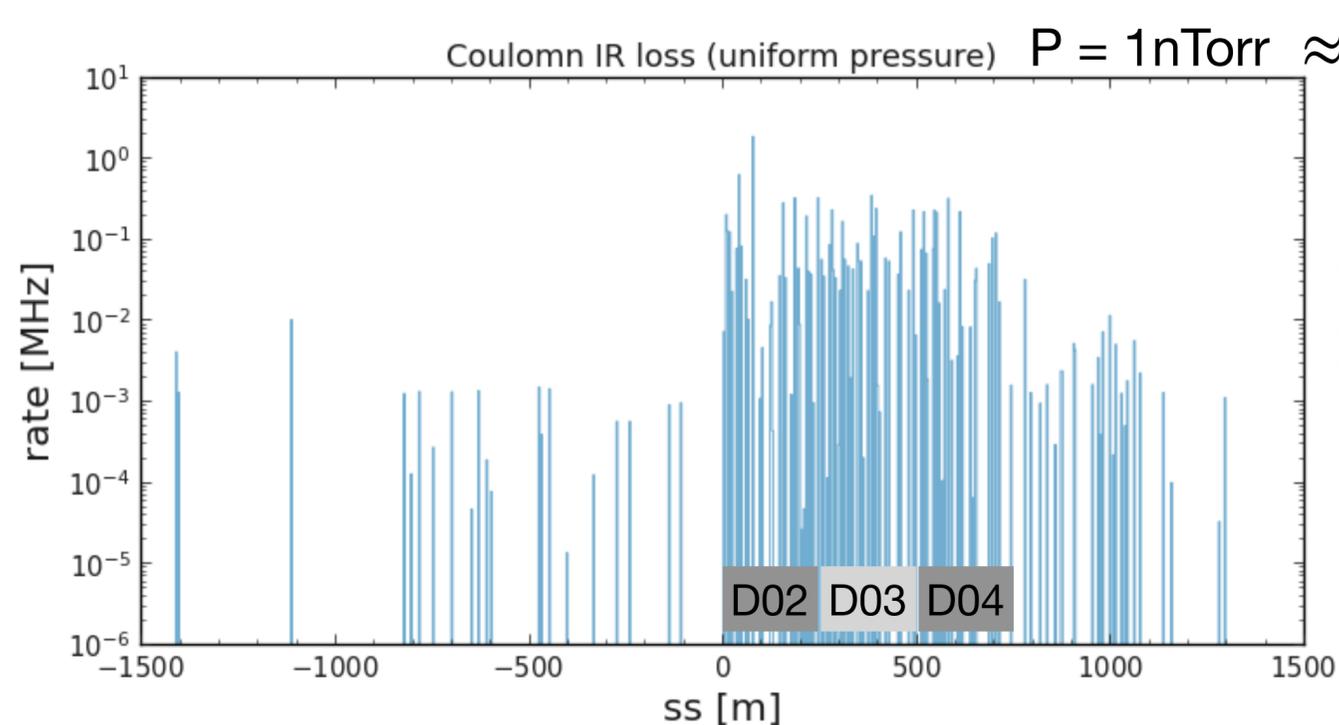
## Qingyuan Liu

### ■ SAD simulation

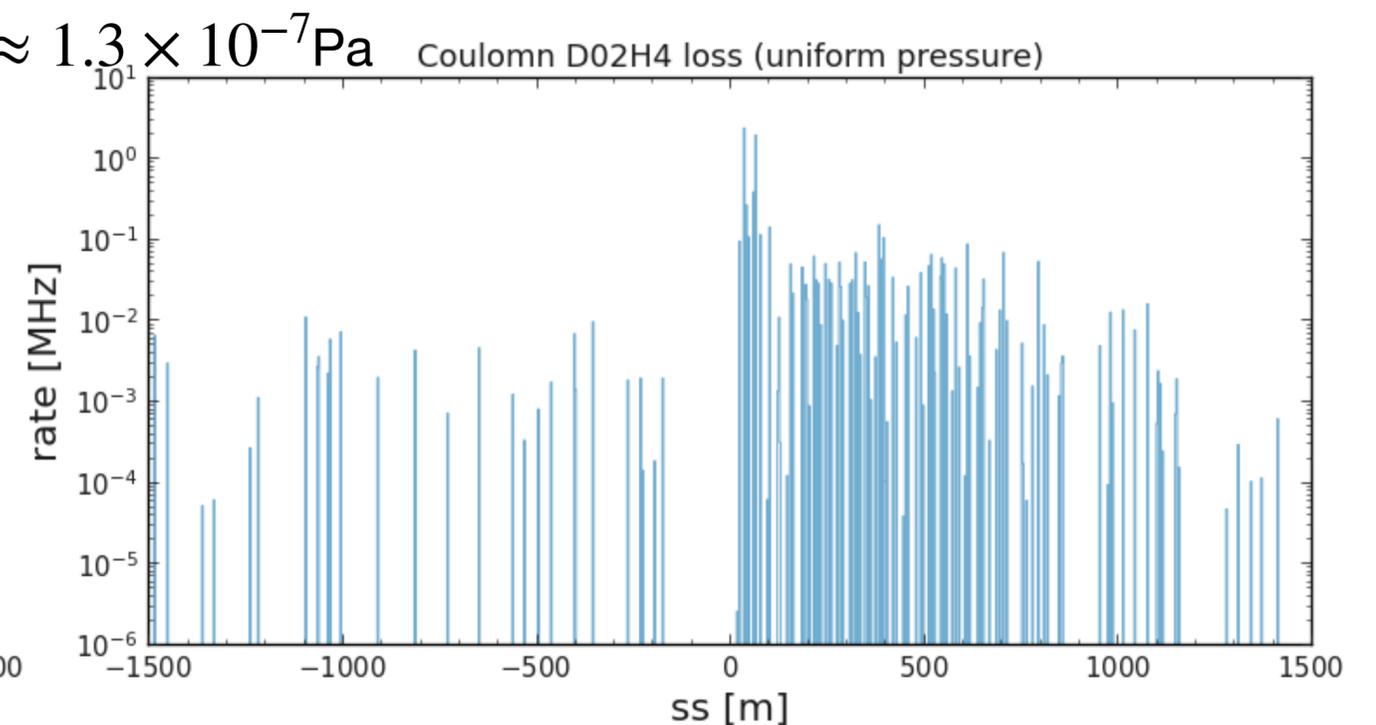
- D05V1 head length scan with CFC (Carbon Fiber Composites) and the 3-mm hybrid head
- Studied weights of all CCG regions for LER

Coulom IR loss [MHz]

D02_L19	1.812632
D02_L22	0.695629
D02_L01	0.372022
D03_L12	0.341038
D03_L13	0.339559
D02_L25	0.326534
D02_L08	0.316830
D04_L16	0.311417
D03_L24	0.309403
D02_L10	0.308278



Scattering location



Loss rate at the collimator closest (13.3m) to the IR