

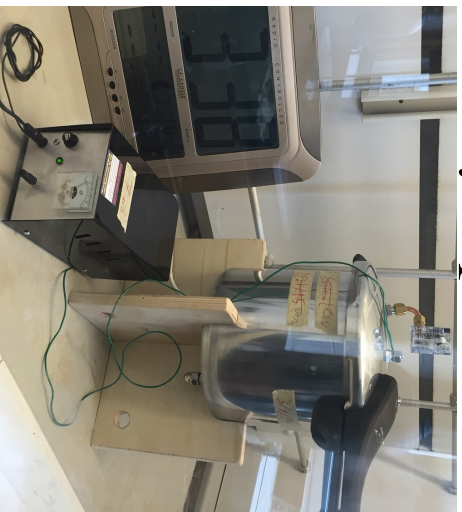
E-Shield: Status and Plans

Physics Goal:

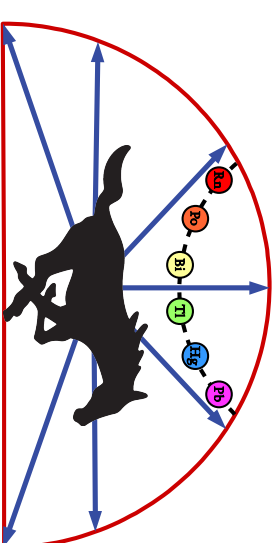
- Quantify radon daughter plate-out rate in presence of strong electric fields

Design Goal:

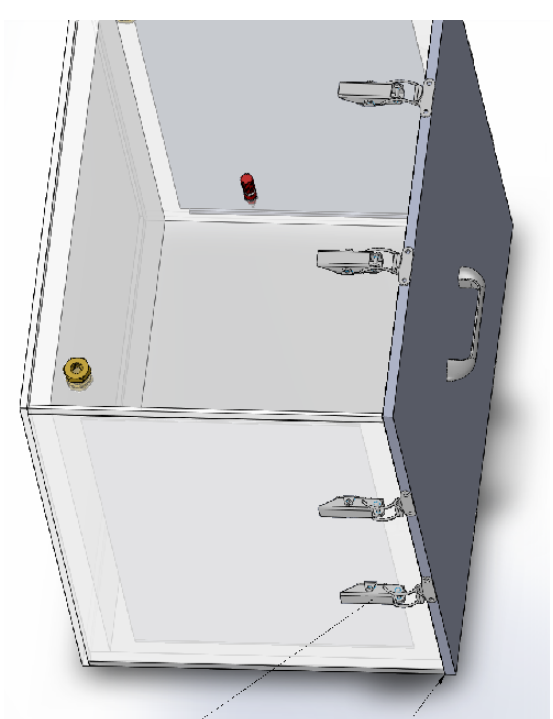
- 35kV potential, enclose samples in anode, ground walls of Rn exposure vessel
- ### LRT2015 Results (Preliminary)
- 98.1% reduction in Rn daughter plate-out with 6kV potential
 - Post-LRT: confirmed first result with second 5-day exposure run.



E-Shield prototype, with repurposed pressure cooker for Rn Exposure Vessel (LRT2015)



SMU E-SHIELD PROJECT



Rn Exposure Vessel Re-Design

Plans – Summer-Fall, 2015

- Test re-designed vessel
- Measure plate-out reduction vs. potential
- Asses ozone-related challenges