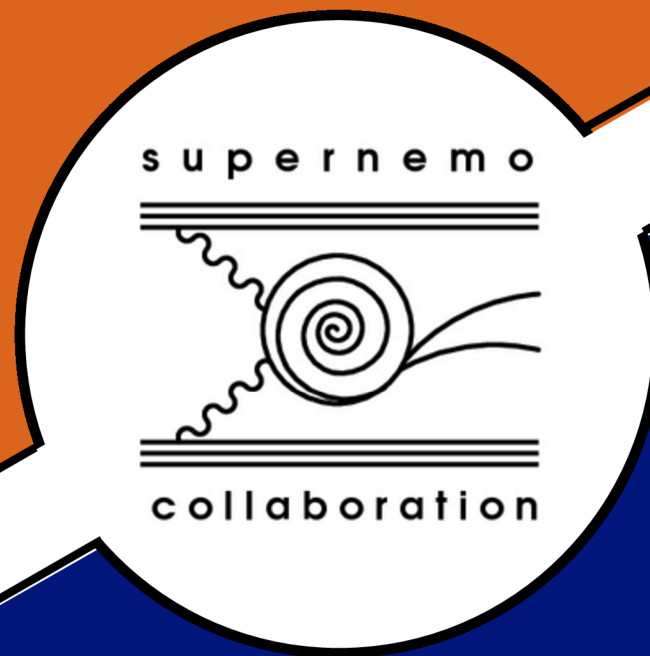
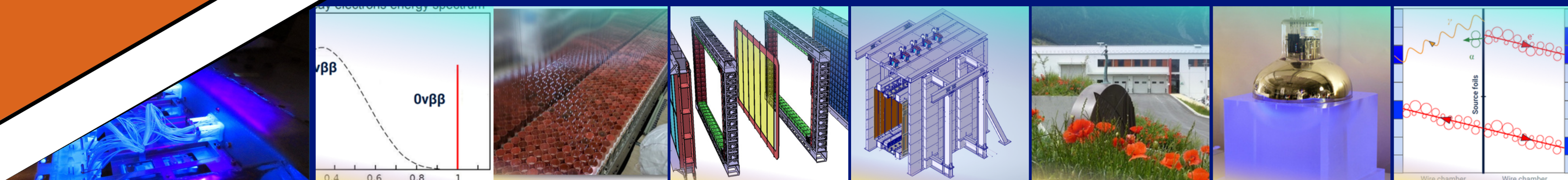


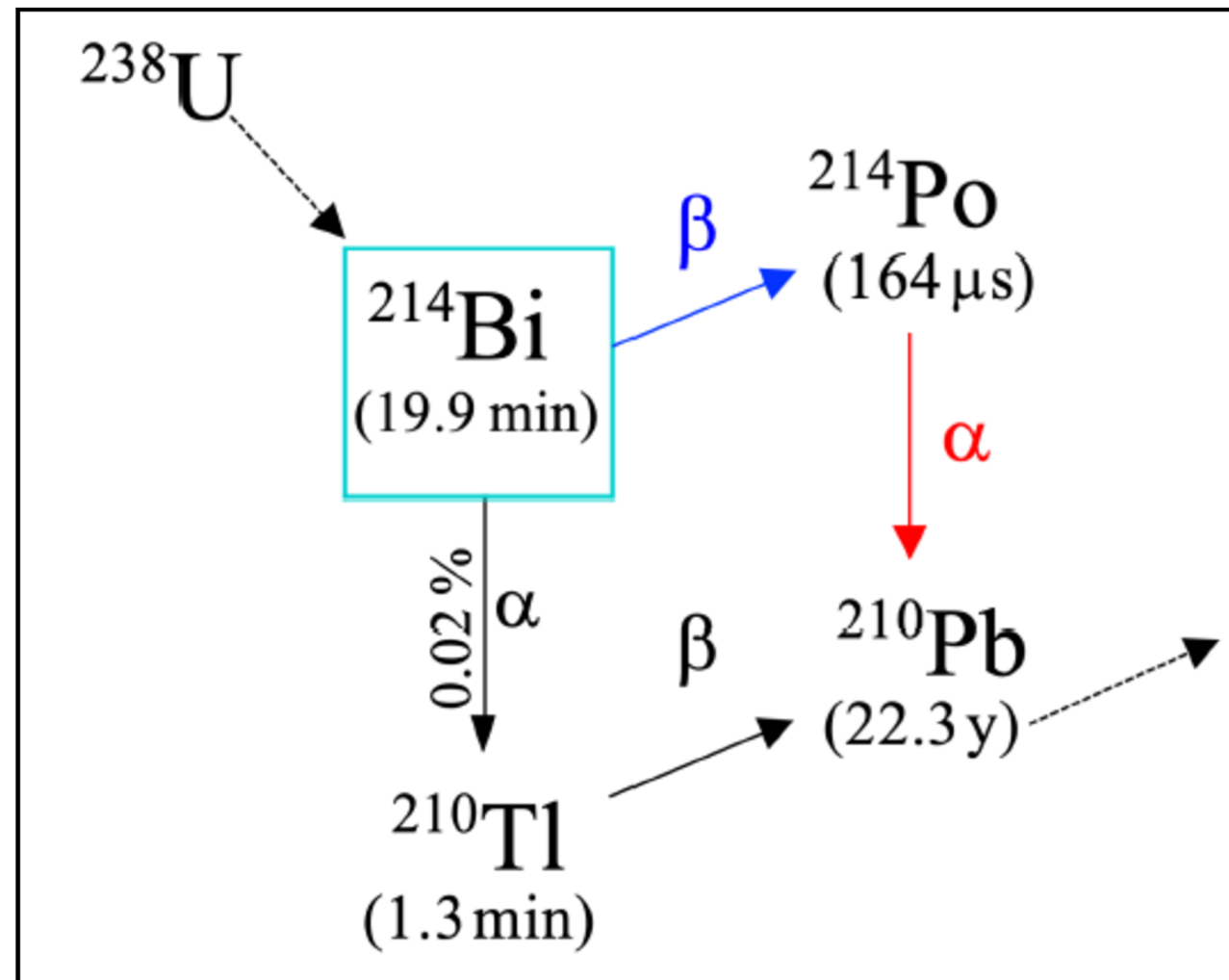
$1\beta 1\gamma$ RADON MEASUREMENT



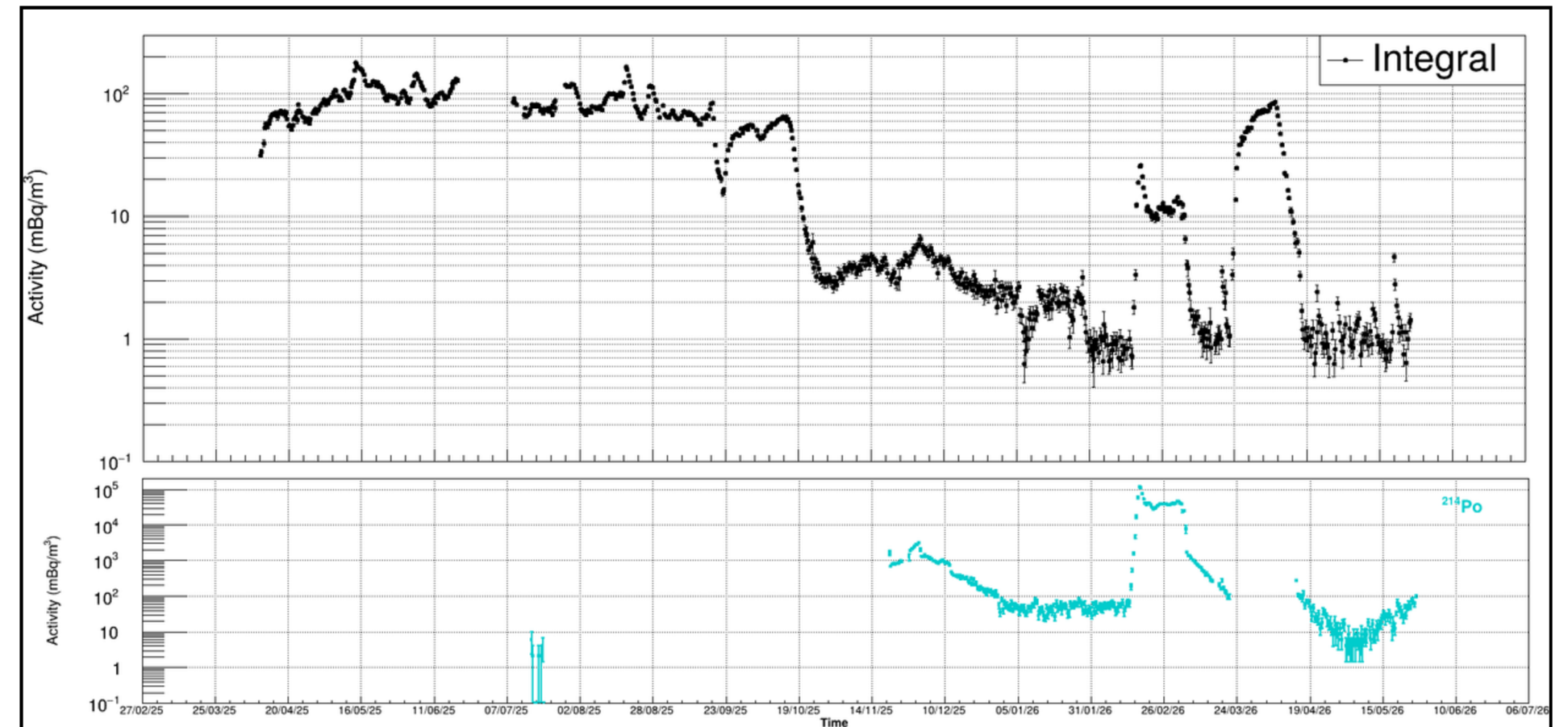
ARYAK KARANAM



RADON AND ITS MEASUREMENT



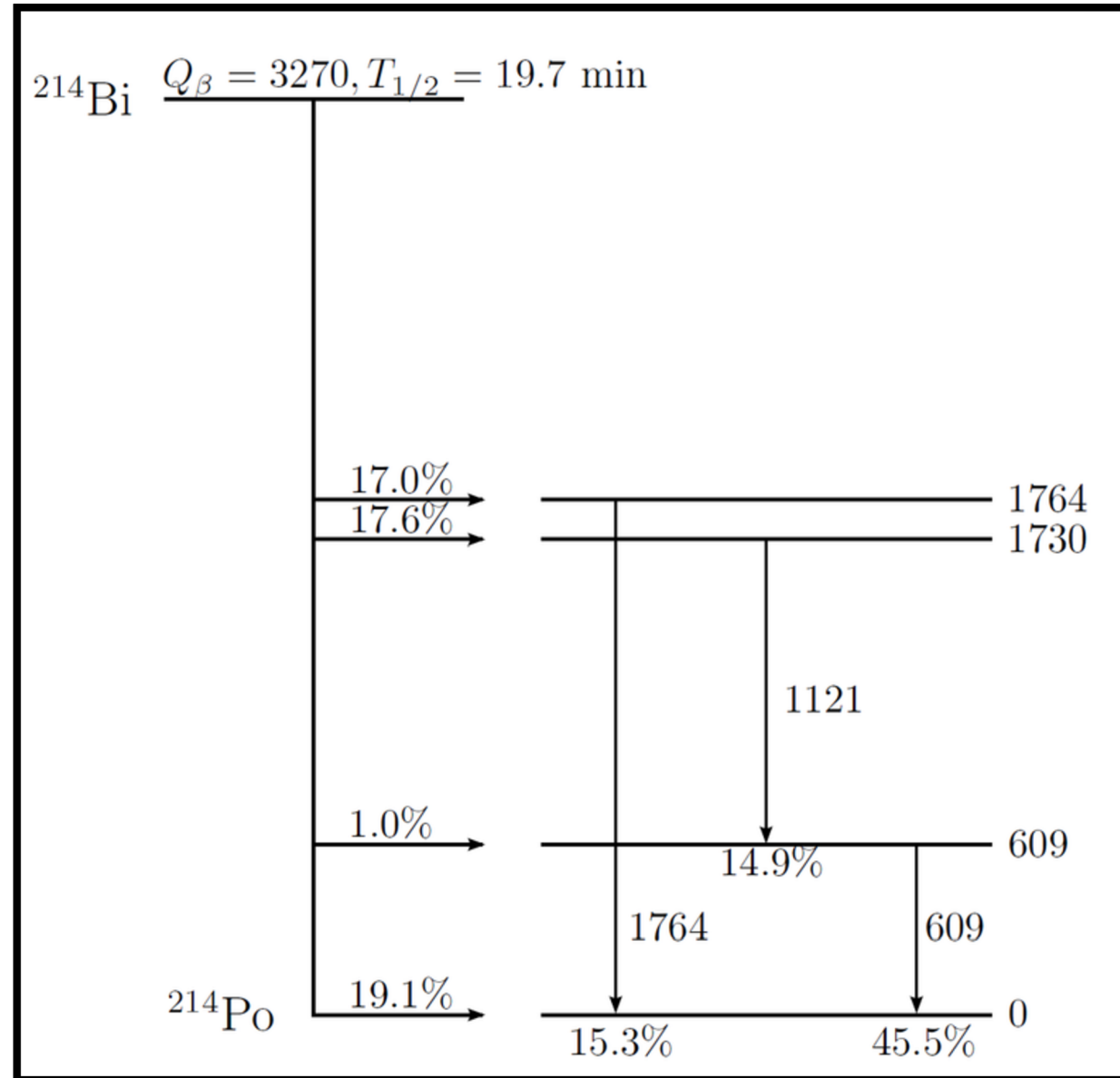
Bi-Po



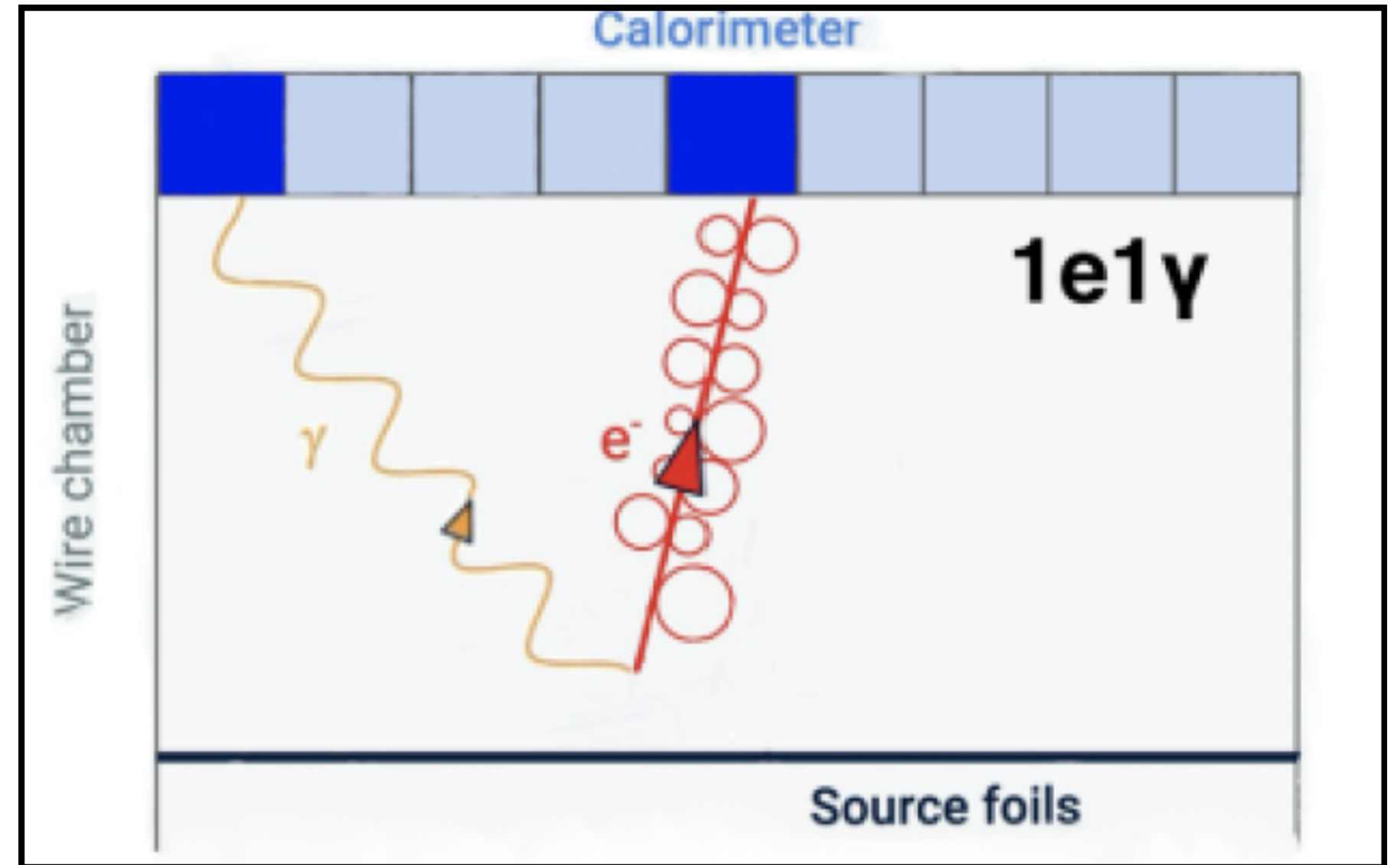
~COURTESY OF ANTOINE LAHAIE

Activity vs time

$1\beta - 1\gamma$



Simplified Decay Scheme



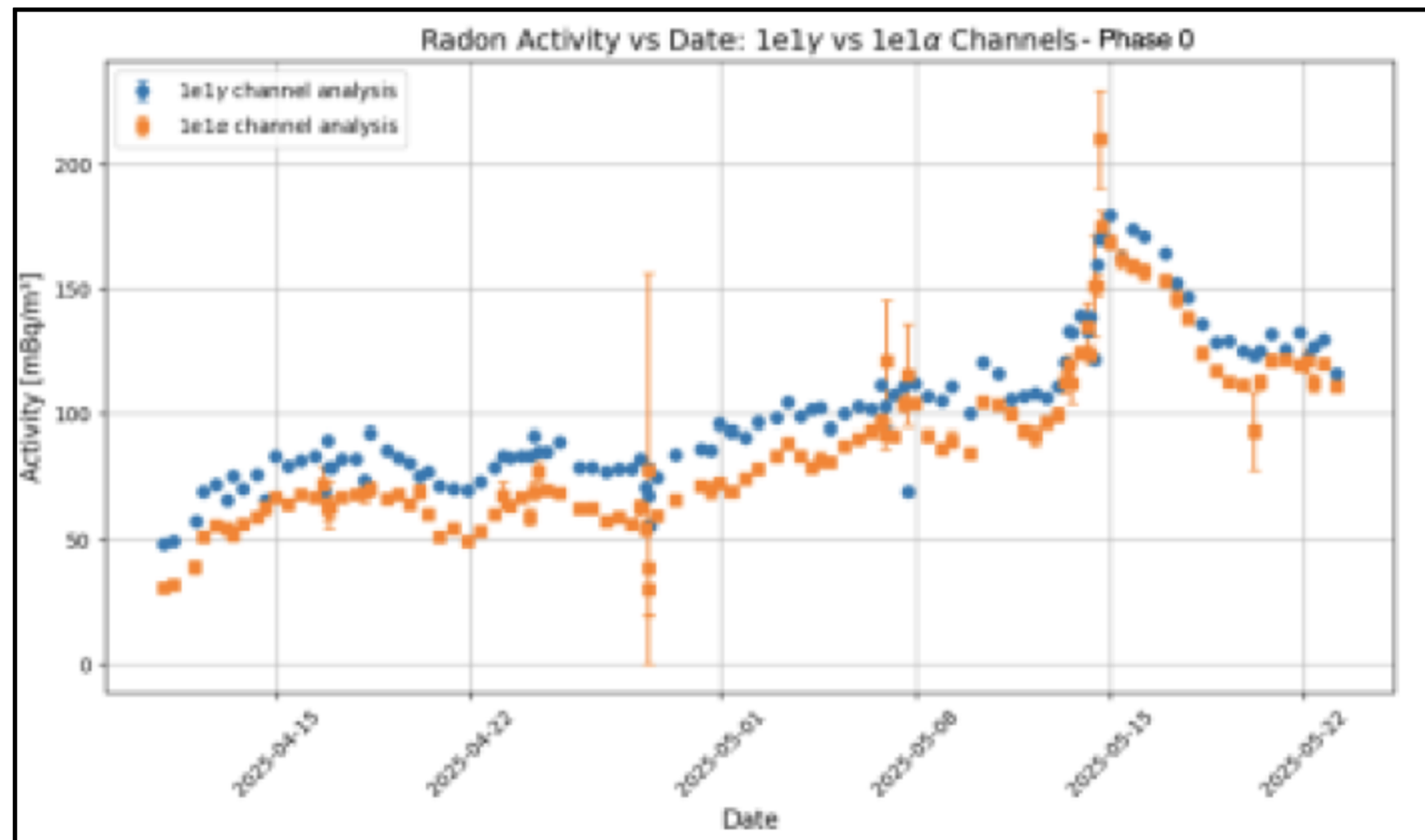
Event Display

PREVIOUS WORK ON $1\beta - 1\gamma$ CHANNEL

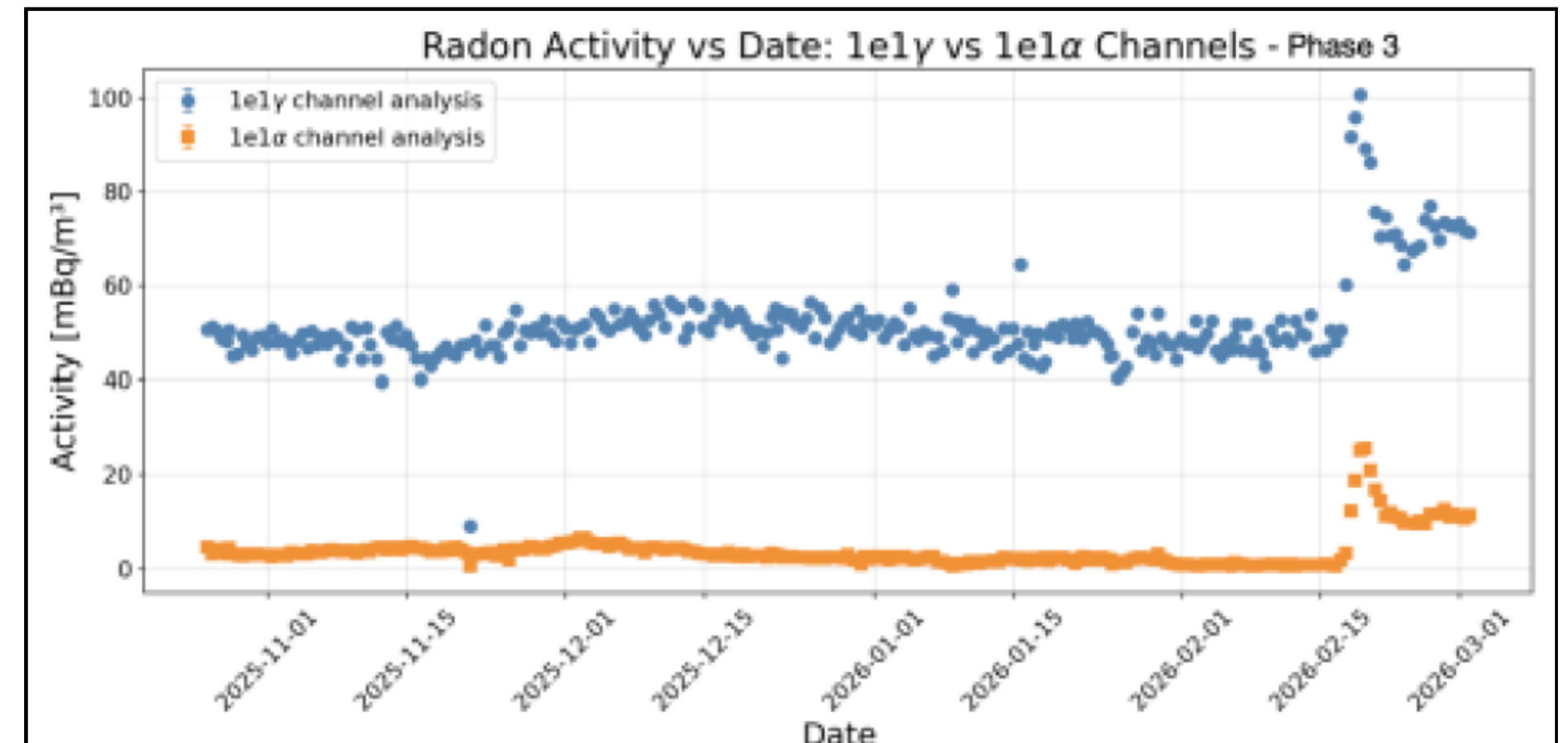
- **PRE-CUT FILTER:** Lower energy threshold of 300keV and 50keV for phase 0 and 3.
- **TOPOLOGY CUT:** Reject all events except those with exactly one electron and one photon.
- **GEOMETRY CUTS:** Events are restricted to hits on the MWall only.
- **TIMING CUTS:** Ensure there is no significant time difference between the electron and photon. Cuts at 1.69 ns and 2.29 ns for phase 0 and 3 respectively were applied.
- **ENERGY CUT:** Upper threshold cut of 3MeV for electron and photon energy is applied to both Phase 0 and 3.



PREVIOUS WORK ON 1β - 1γ CHANNEL



PHASE 0



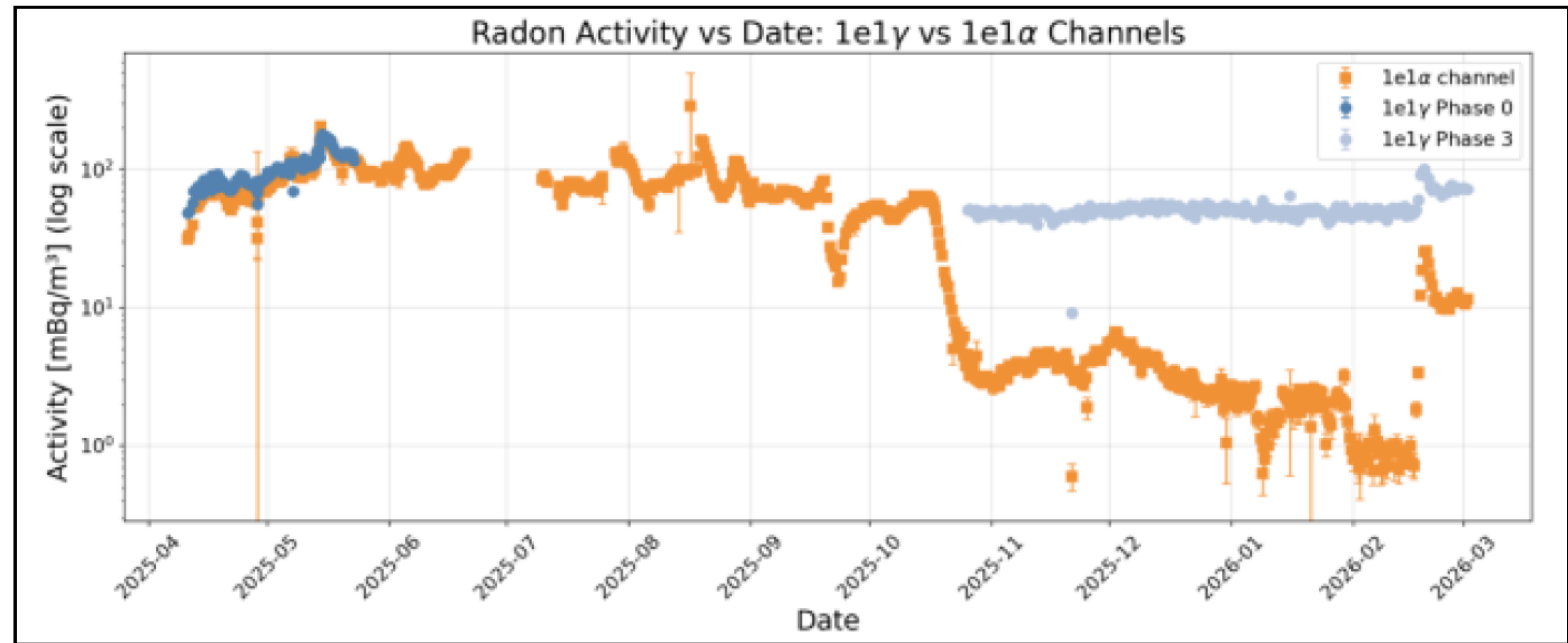
PHASE 3

~COURTESY OF AYLISHA HARRIS



MY WORK AND GOALS

- Validate Aylsha's results.
- Extend it for all the phases.
- Understand discrepancy between phase 0 and phase 3.



~COURTESY OF AYLSHA HARRIS

THANK YOU!

