

# Radiation Safety in HEP

- Physics Radiation Protection Supervisor: Paul Campbell (nuclear physics, 4<sup>th</sup> floor)
- All staff and research postgrads must:
  - View a safety training course
    - <http://www.hep.man.ac.uk/safety/RadiationCourse>
  - Be familiar with local rules and risk assessment
  - Fill in and sign radiation worker registration form

HEP sources are stored in the safe in 5.20

- Rn222 ( $\alpha$ ); Sr90 ( $\beta$ ); Cd109, Fe55 ( $\gamma$ )
- Logbook is inside safe.
- Sources should be returned to safe at the end of each working day.
- If kept out for > 1 day, you must record their location in the logbook.

Our sources are mostly very low activity so low risk

- Below authorized contact limit for members of public
- >1m away the dose is below background levels
- Potentially dangerous only if container is broken and isotope spills out.

If this happens:

- Don't leave the area as this could spread contamination
- Have another radiation worker contact the RPS (Paul Cambell, 4<sup>th</sup> floor Schuster)
- One Sr90 source is higher activity (#51805 – in large lead container)
  - Minimise exposure time
  - Use shielding
  - Keep as far away as possible

Local Rules and Risk Assessments can be found in folder on the safe.