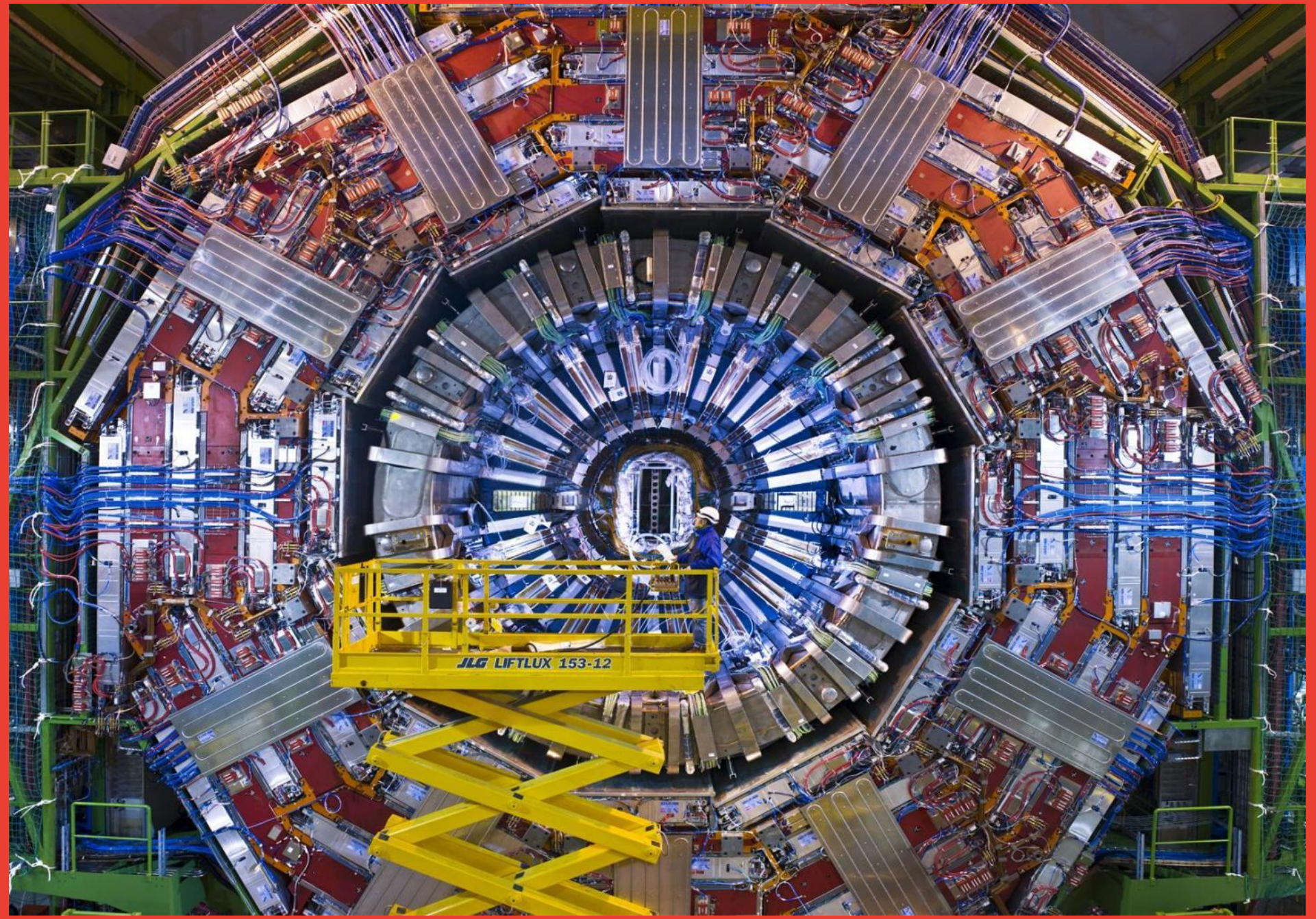


Presentation 1

OVERVIEW: GEM TECHNOLOGY IN THE CMS EXPERIMENT

Lexxi Reddington



JLG LIFTLUX 153-12



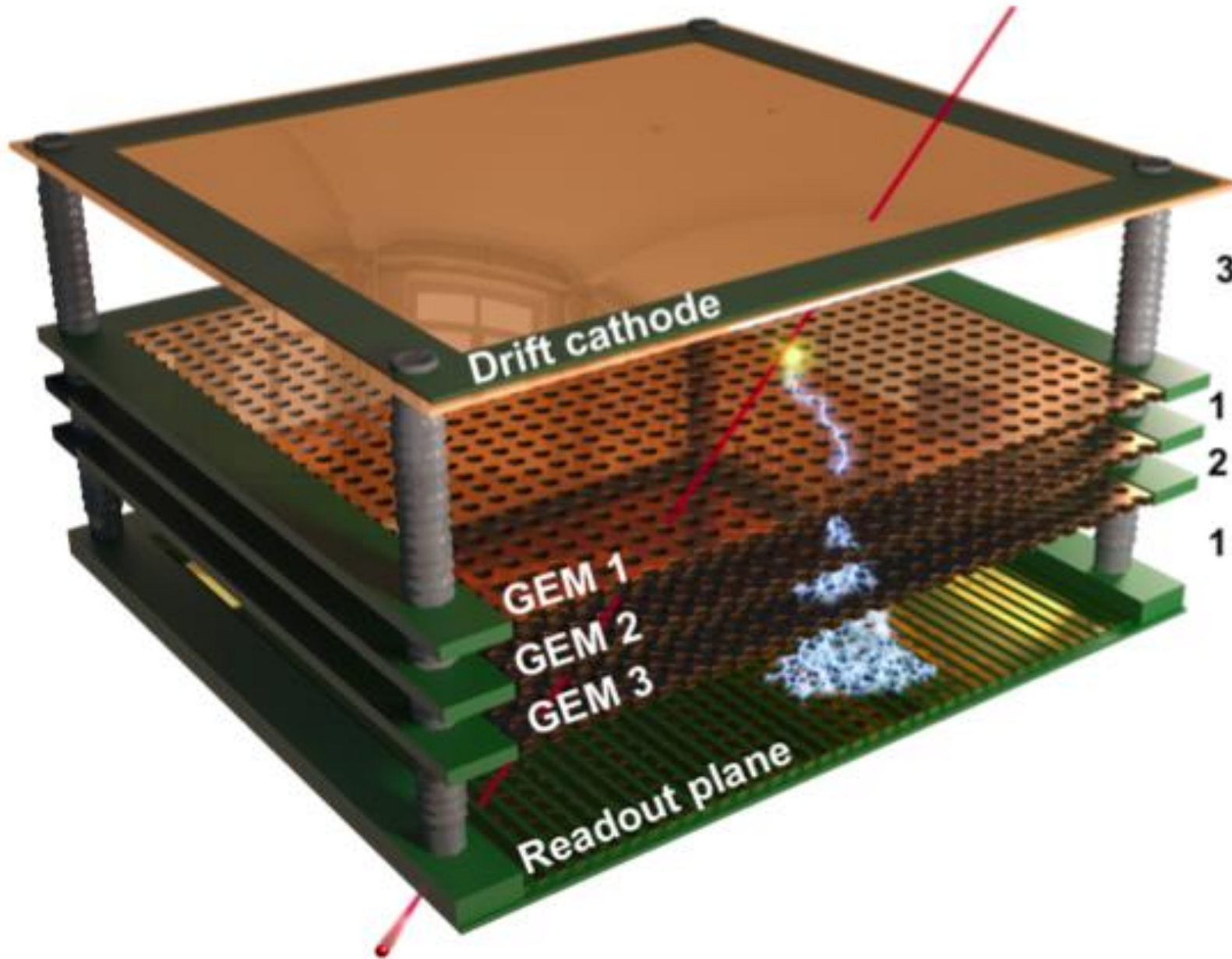
GEM

MEANING

- Gas Electron Multiplier

PURPOSE

- Amplify electrical signals left by the crossing of particles



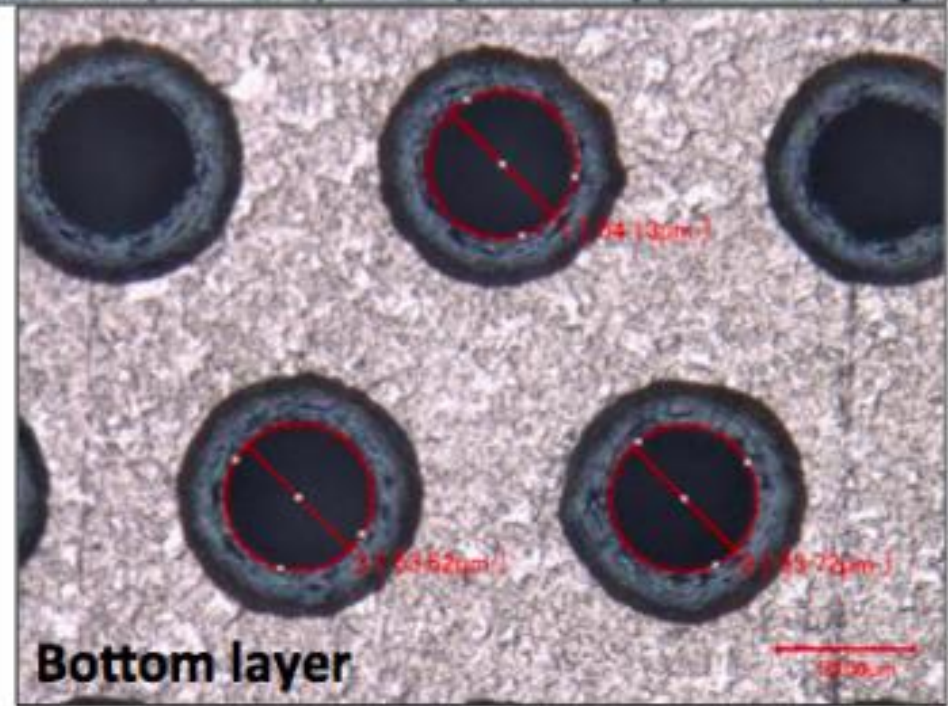
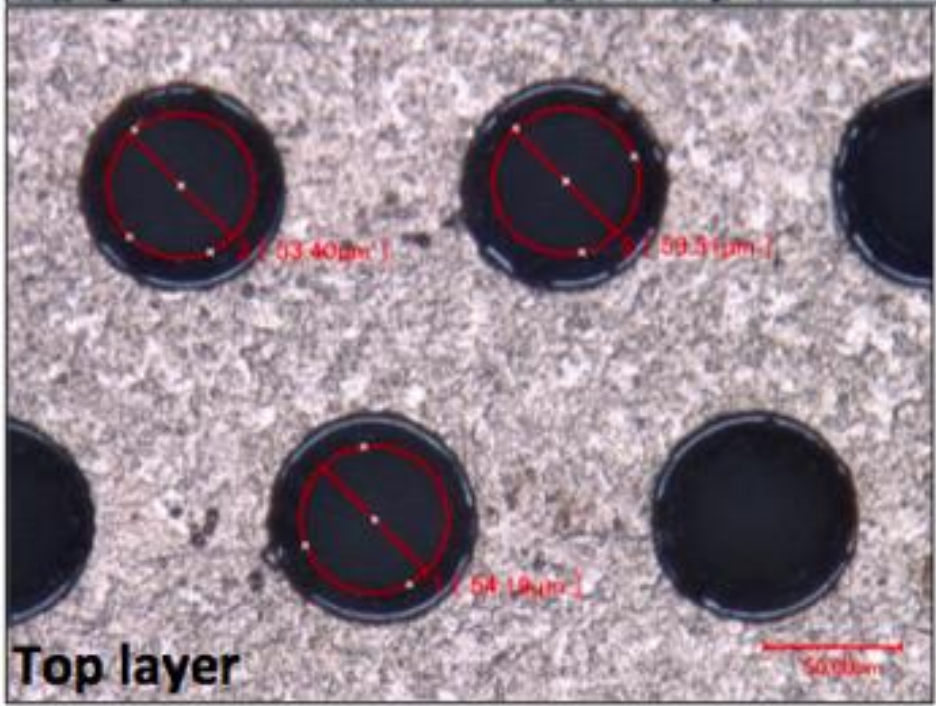
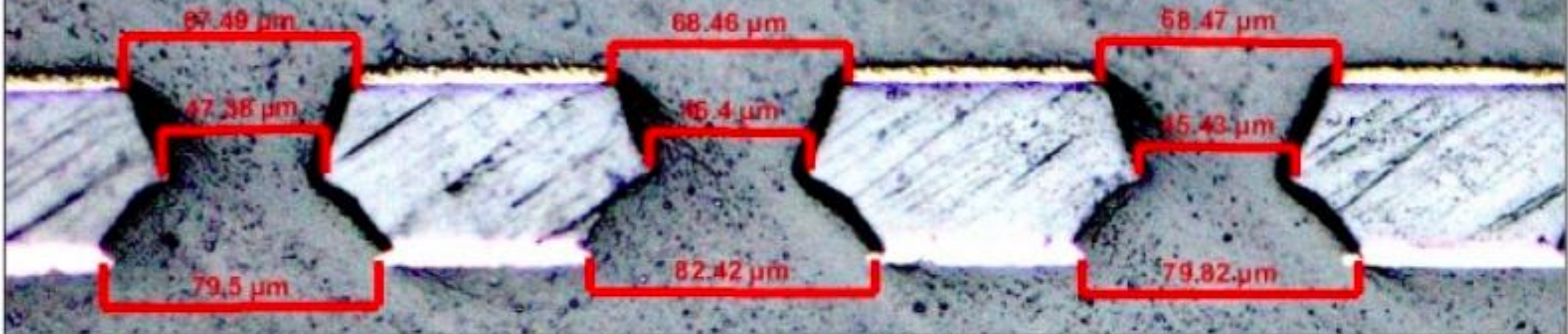
3 mm *Drift gap*

1 mm *Transfer gap T1*

2 mm *Transfer gap T2*

1 mm *Induction gap*

Cross-section





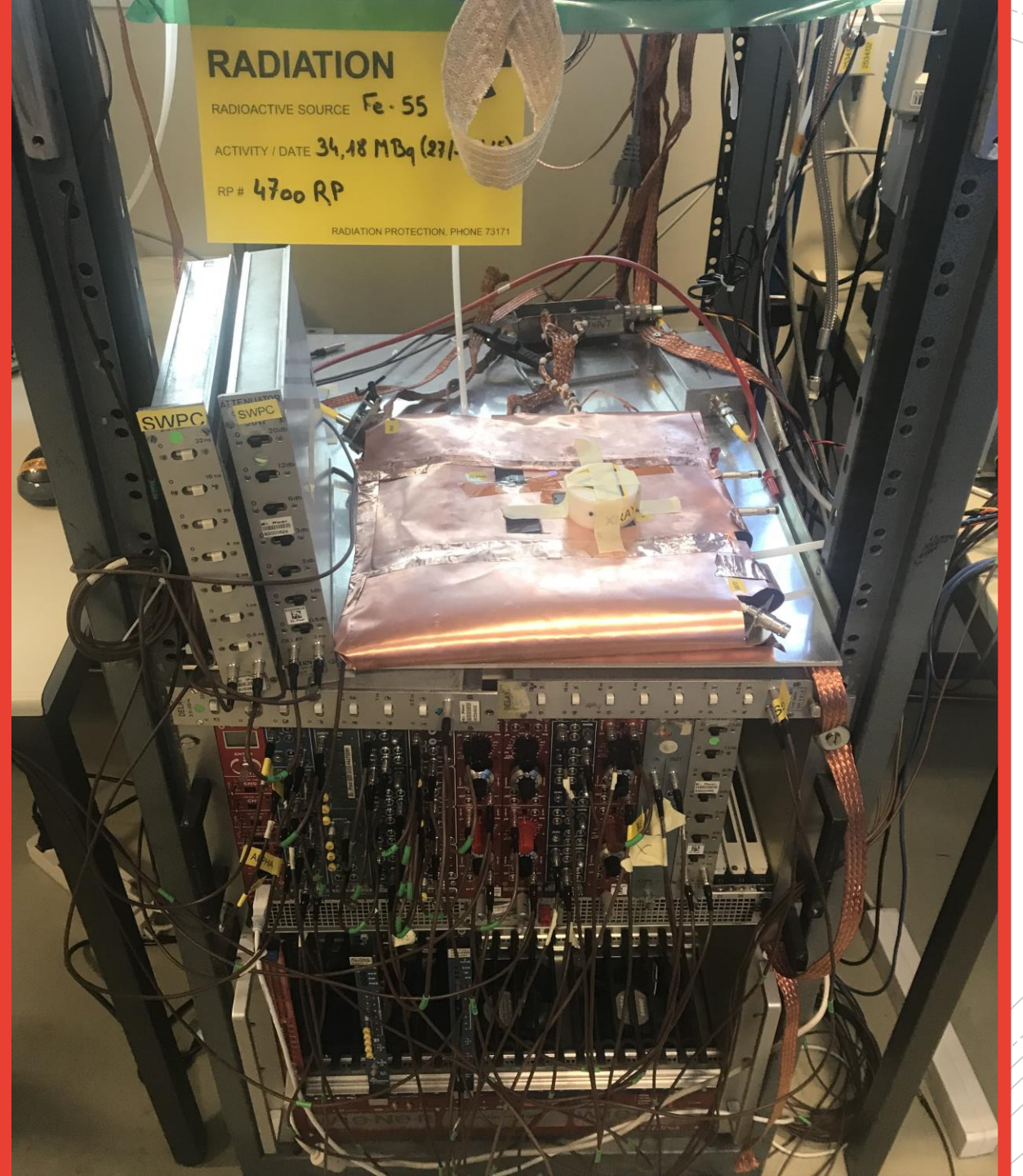
ROLE

- Operate a custom-made outgassing test stand

PURPOSE

- Validate the use of certain materials in the GEM detectors

GEM Detector Prototype



The image features a central yellow speech bubble with a tail pointing downwards, containing the text "Thank you!" in a bold, black, sans-serif font. The background is white with several concentric, light gray circles and dashed lines, creating a subtle pattern. The speech bubble is positioned in the center of the frame, and the text is centered within it.

**Thank
you!**