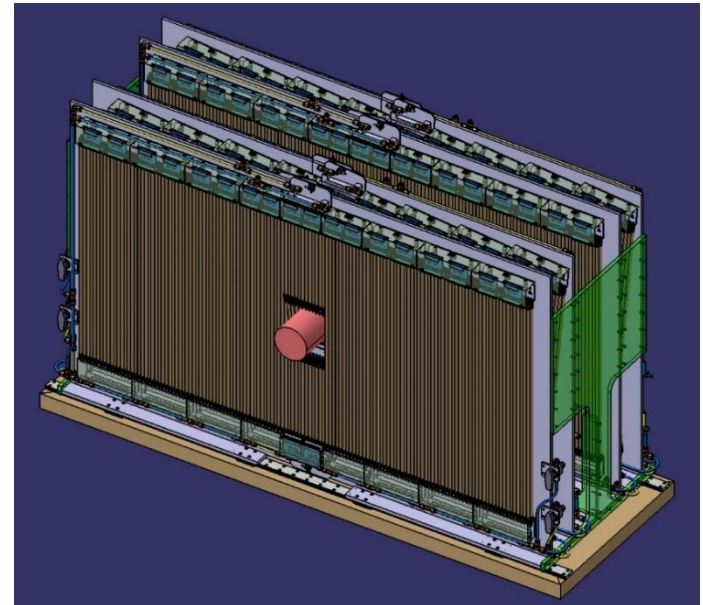


# News on the Forward Tracker

*Jerzy Smyrski, Jagiellonian University, Krakow*

- Frames for FT1, 2
- Production of FT1, 2 modules
- Measurement of anode wires positions

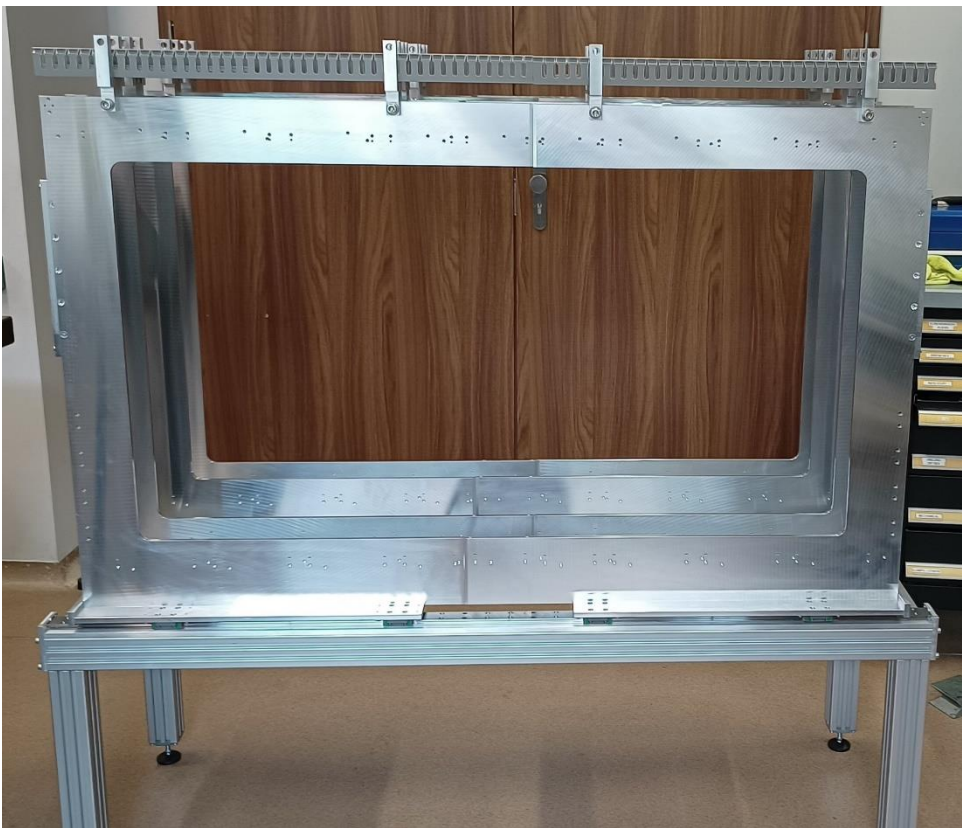
FT1, 2



# Support frames for FT1, 2

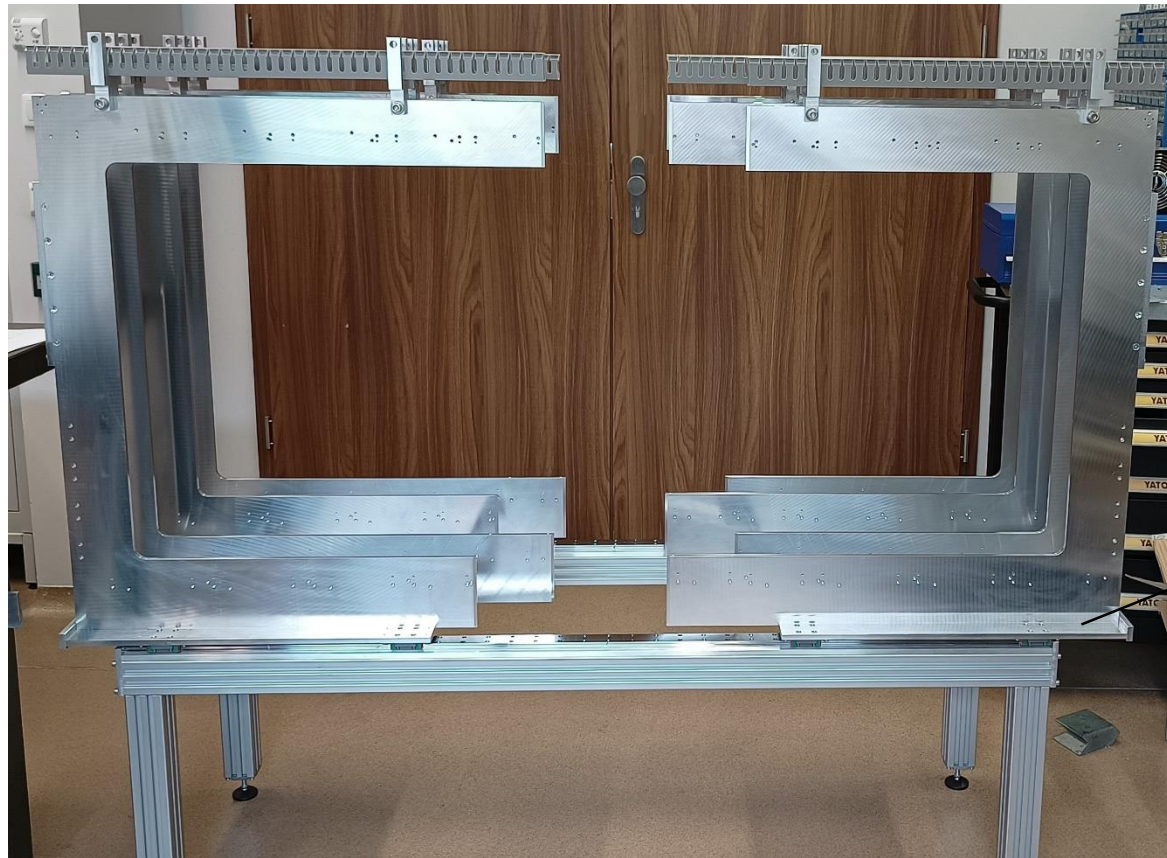
4 rectangular frames, each consisting of left and right half-frame,  
support 8 double layers of straws:

$(0^\circ, +5^\circ)$ ,  $(-5^\circ, 0^\circ)$ ,  $(0^\circ, +5^\circ)$ ,  $(-5^\circ, 0^\circ)$



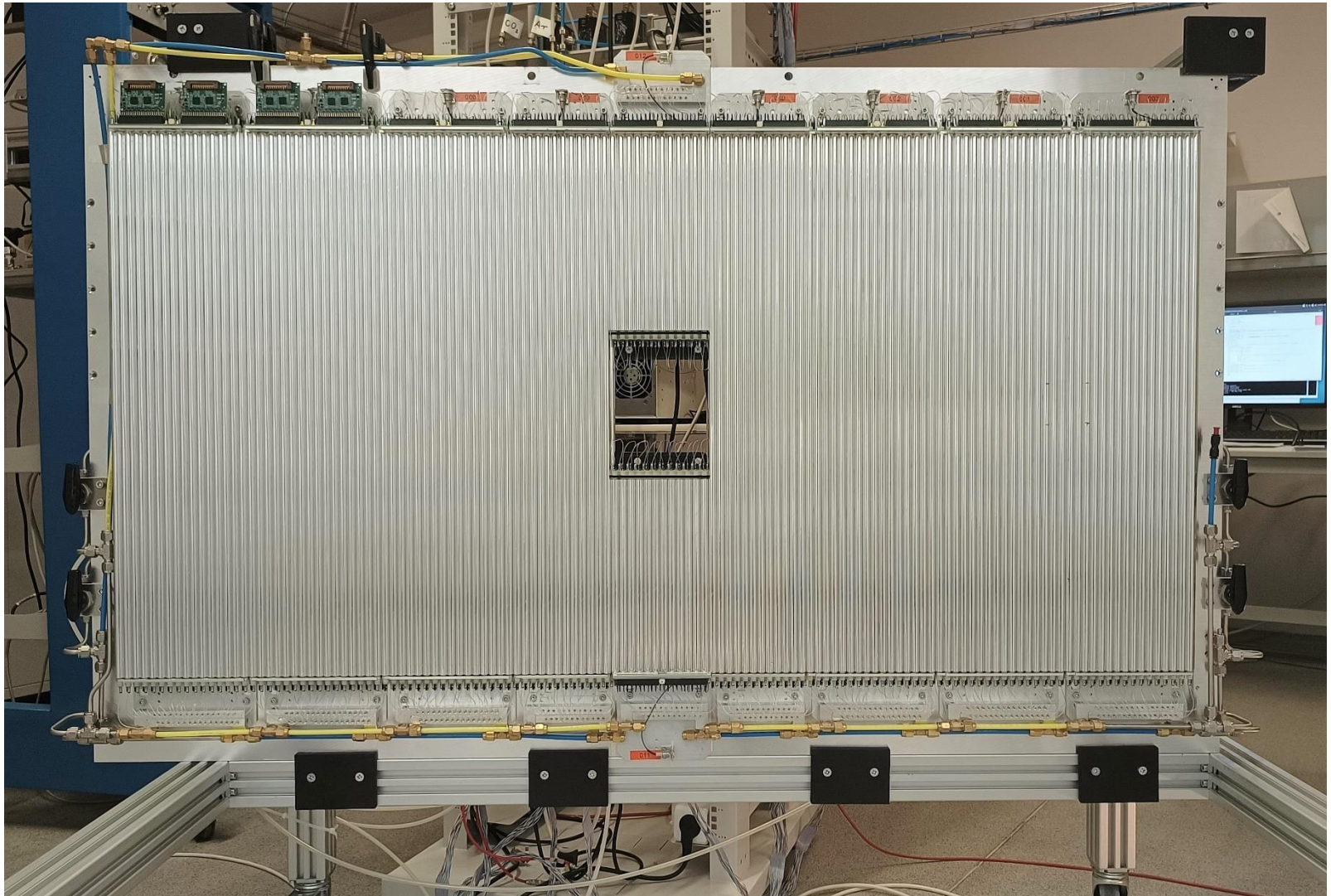
# Support frames for FT1, 2

The half-frames are mounted on two movable tables to facilitate the installation on the beam line.

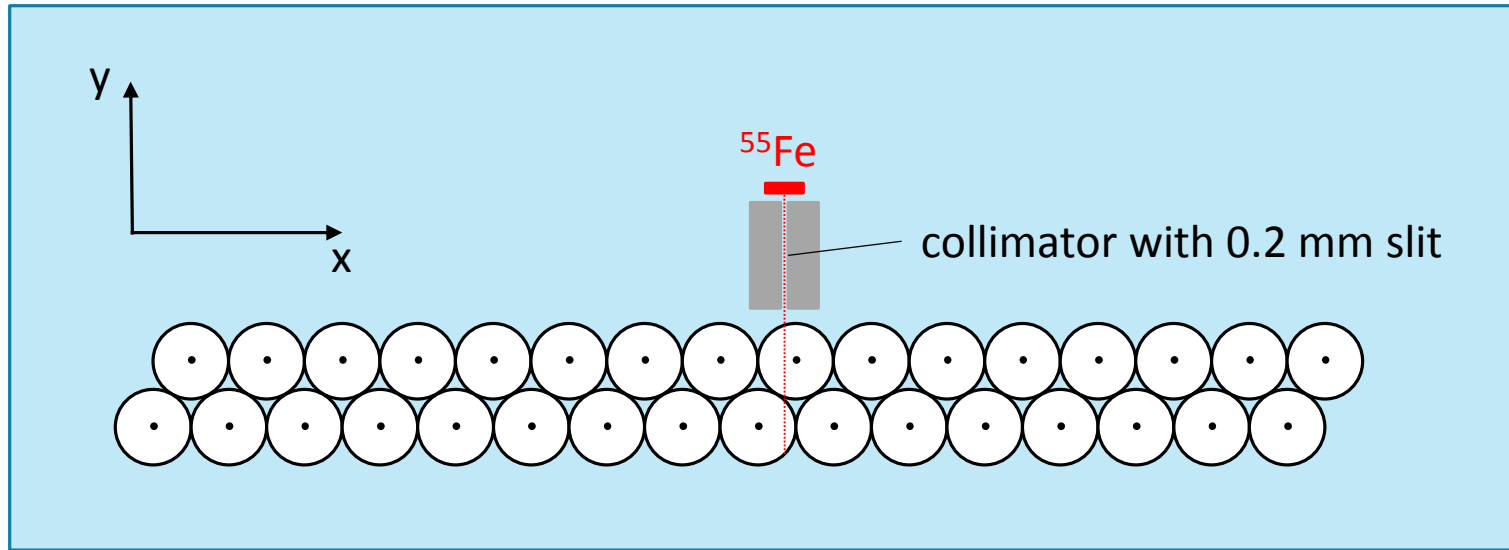


movable table

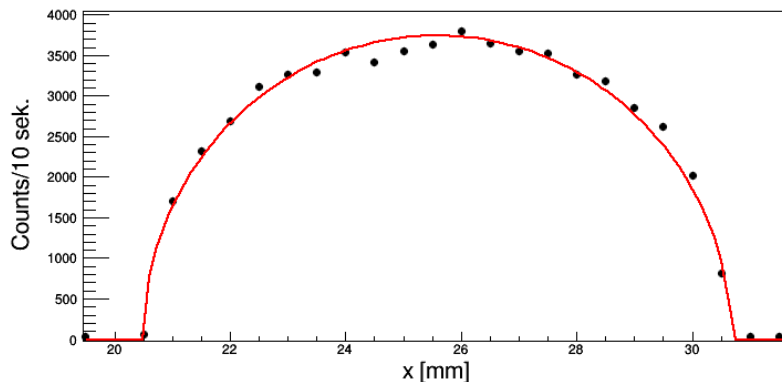
# Frame with mounted straw tube modules



# Inspection of straw positions in the module



Number of counts  $N$  in the straw in function of the source x-coordinate (scanning step  $\Delta x = 0.5$  mm)



Straw circumference:

$$(x - x_0)^2 + (y - y_0)^2 = R^2$$

Number  $N$  of absorbed X-rays:

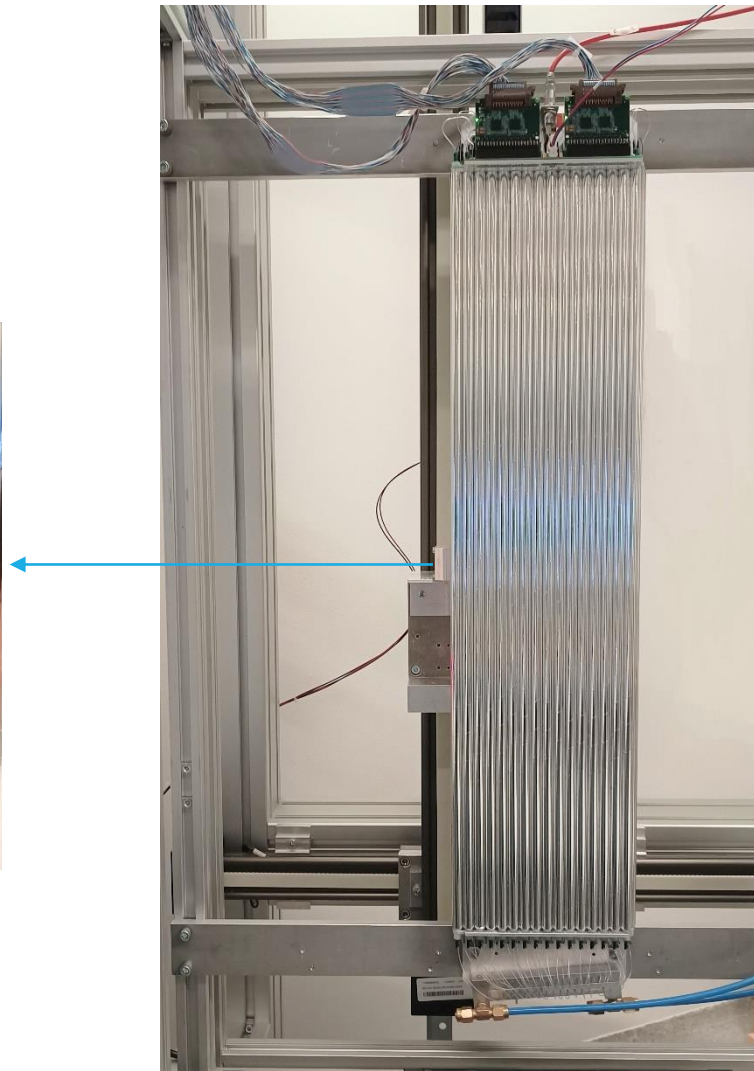
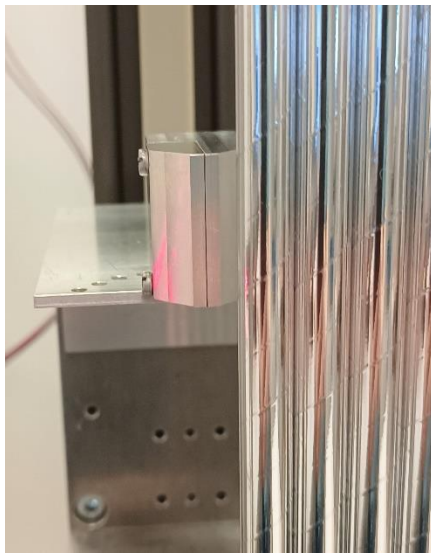
$$N = a(y - y_0)$$



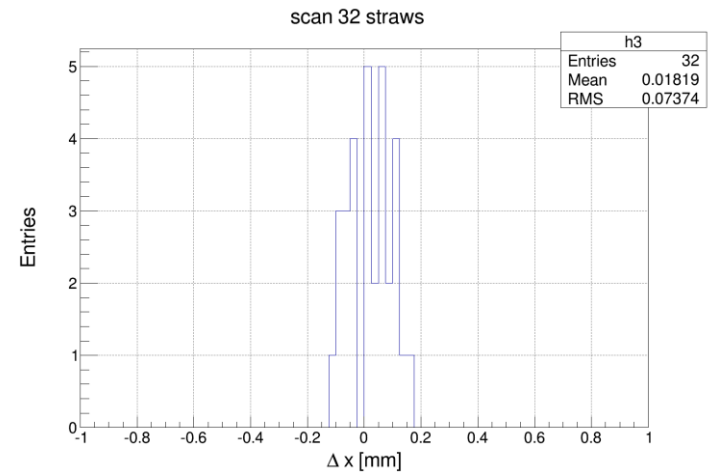
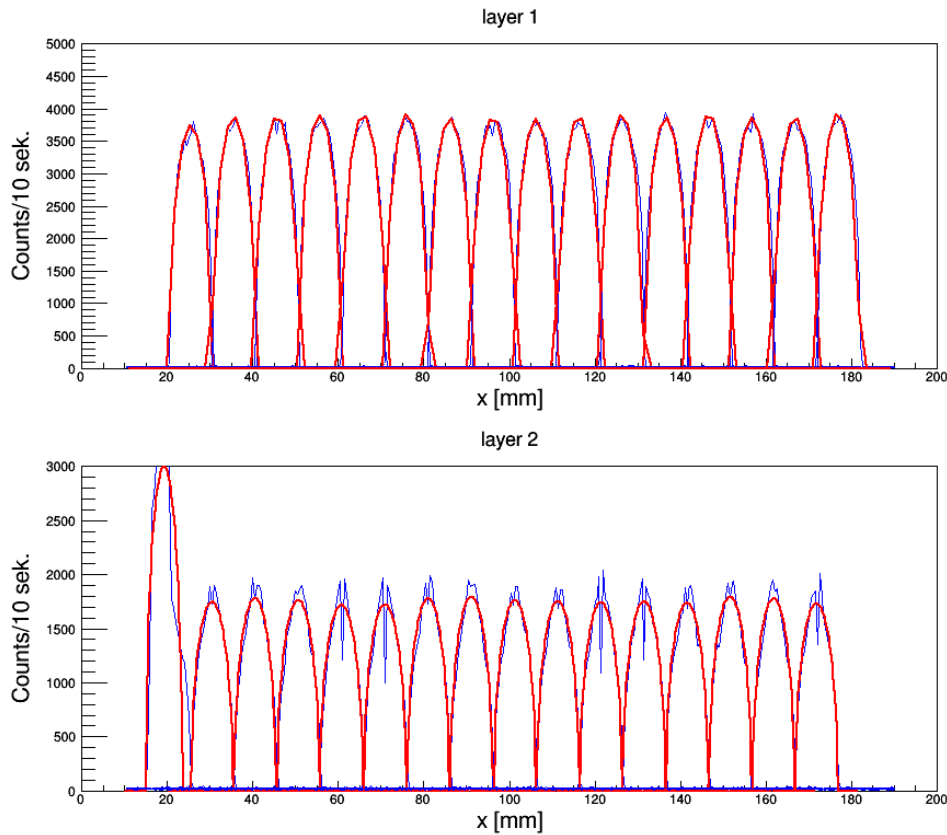
$$(x - x_0)^2 + (N/a)^2 = R^2$$

# Tested module mounted near x-y positioning stage

slit collimator

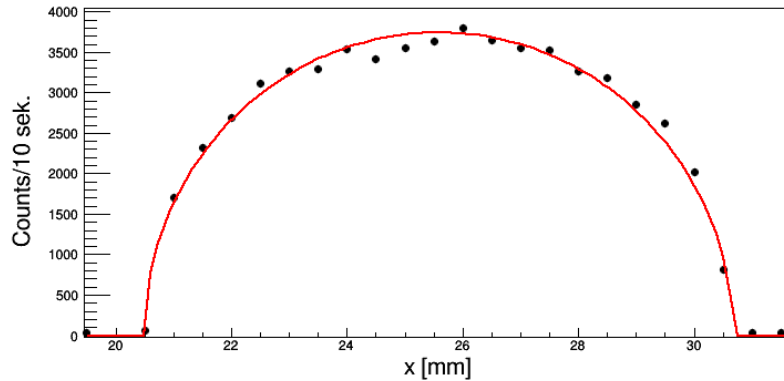


# Scan of straw positions

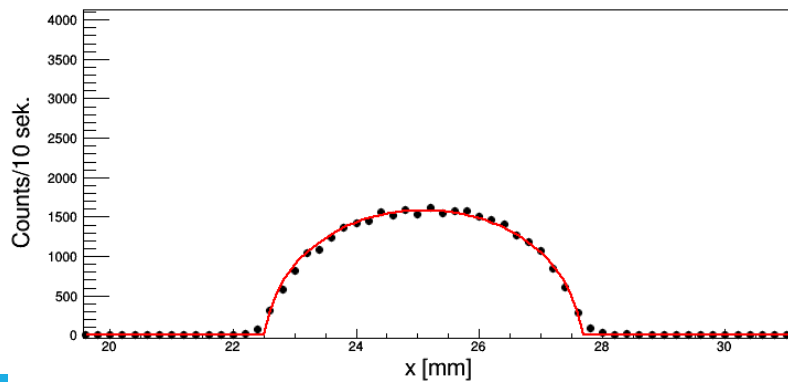


# Inspection of anode wire positions

Number of counts in function of the source  
x-coordinate  
(skanning step  $\Delta x = 0.5$  mm)



As above but after adding 2% O<sub>2</sub> to the working gas  
(skanning step  $\Delta x = 0.2$  mm)





# Skans of wire positions

