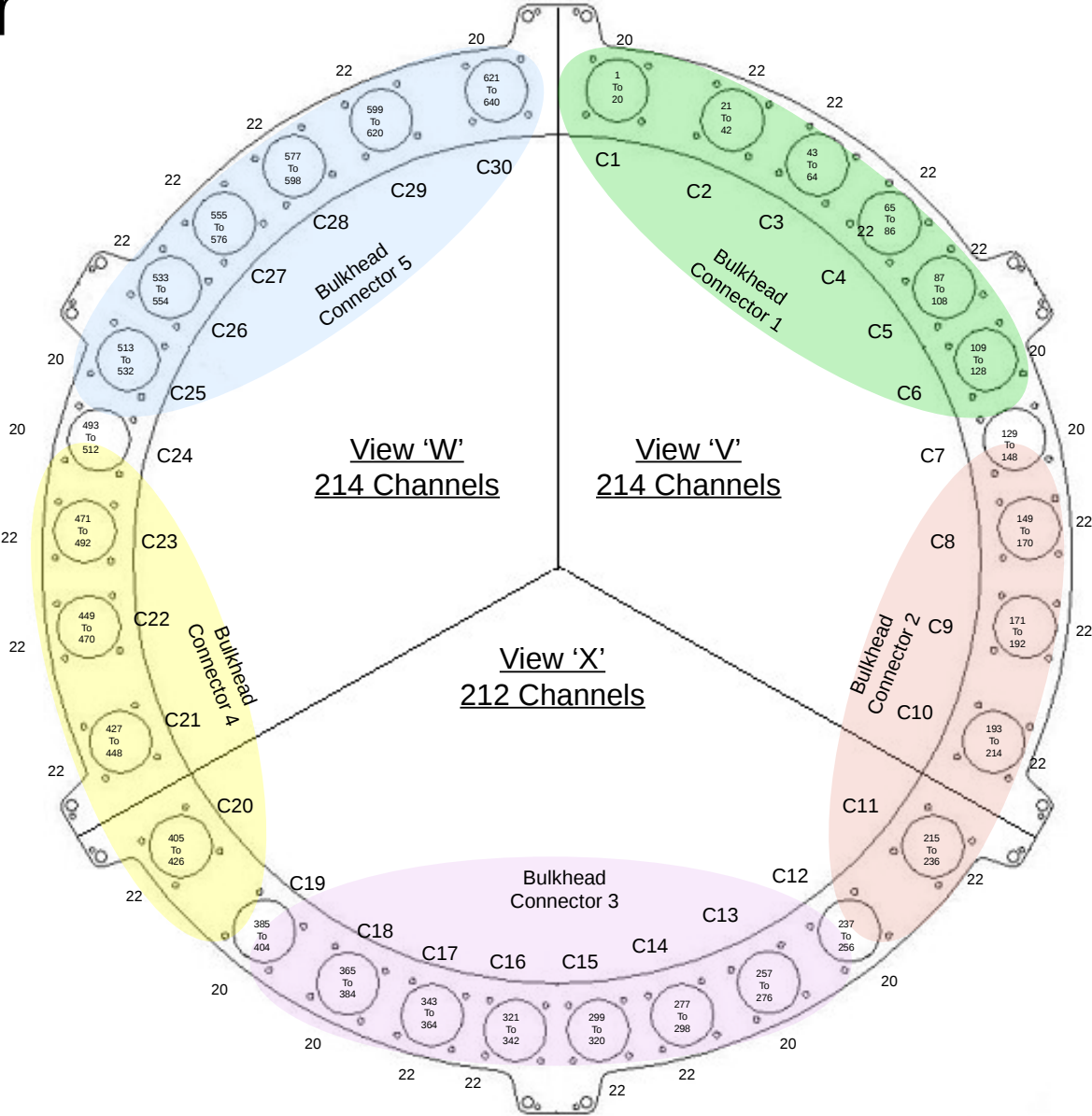


# Station Layout for all Stations



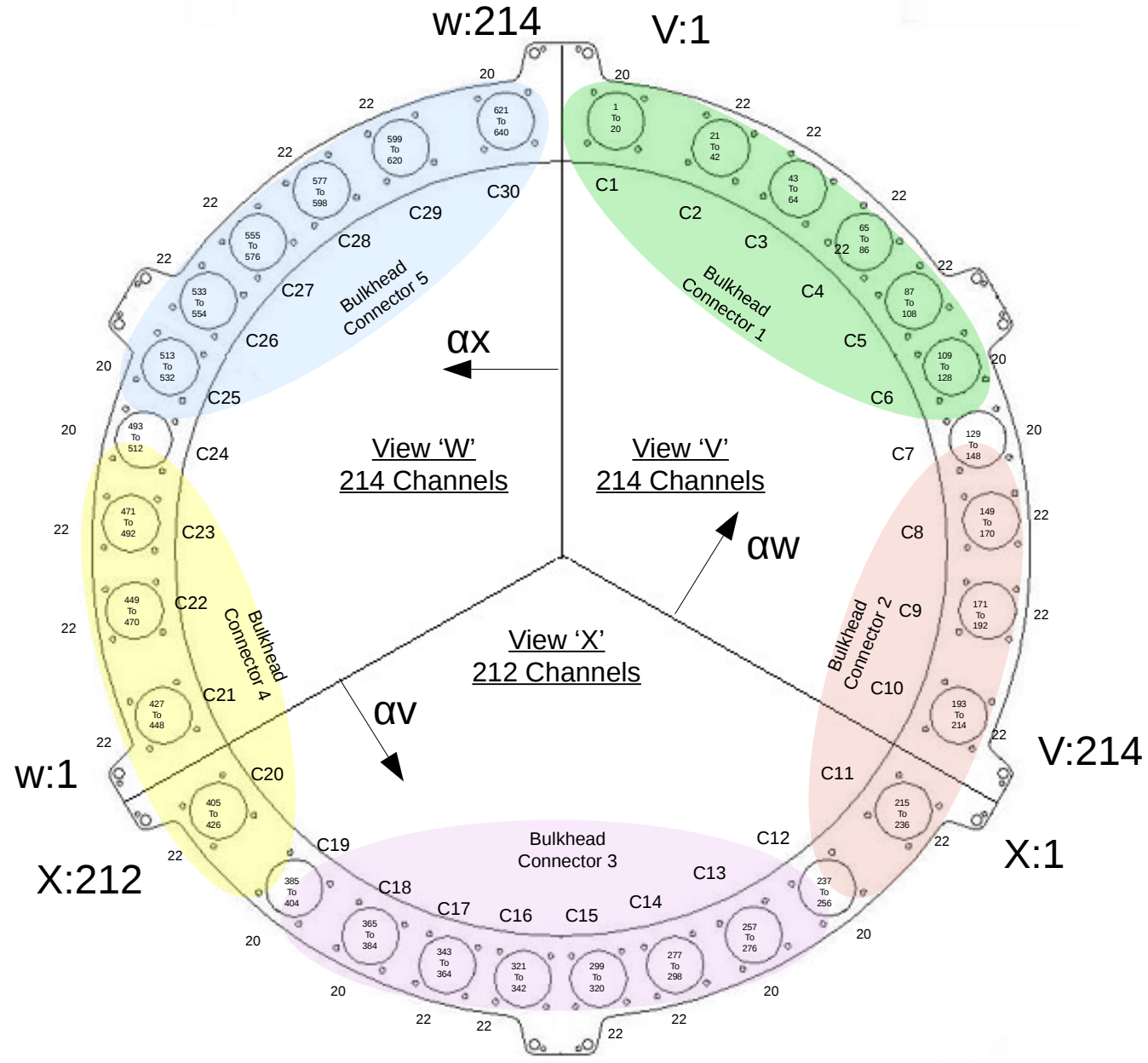
View of the station onto the polished face of the connector

Upstream

Tracker 2

Muons travel into page.

You are looking from the end of the solenoid (near TOF1) inwards to the absorber.



MICE Global Coordinates  
 $\alpha_x = x$  in upstream

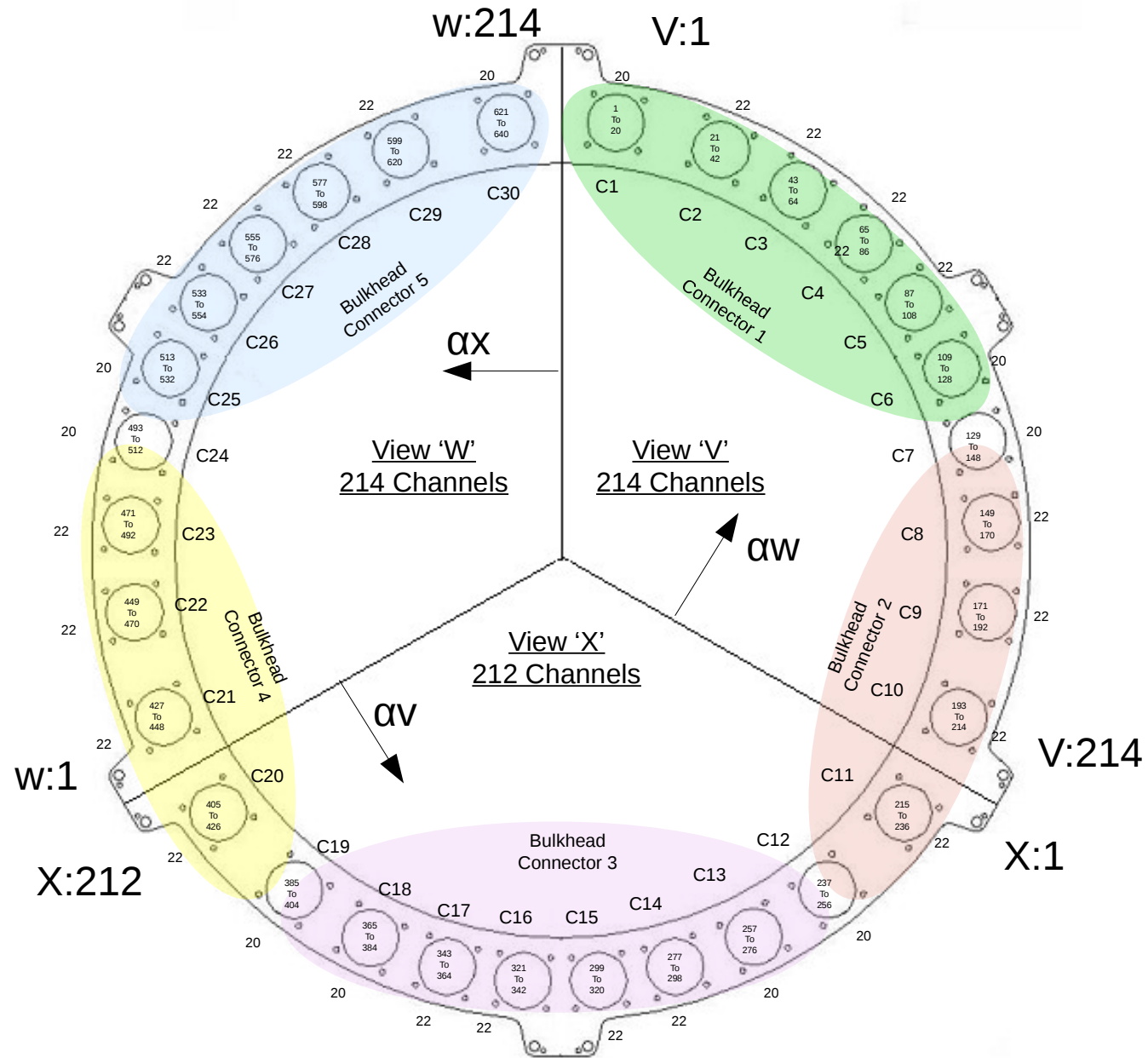
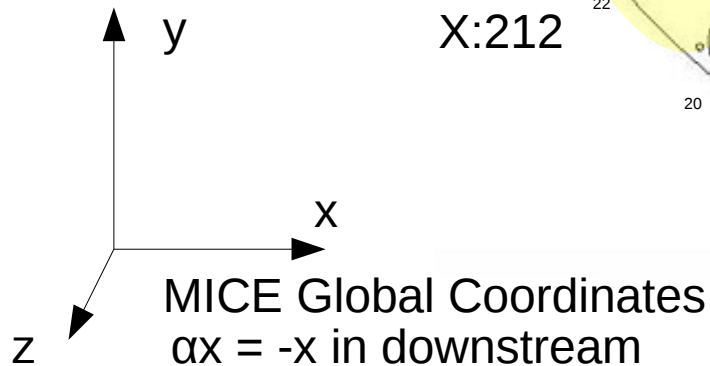
Downstream

Tracker 1

Muons travel out of page.

You are looking from the end of the solenoid (near TOF2) inwards to the absorber.

Note that the coordinate system has been altered to reflect the rotation of the downstream tracker.



## Upstream example

Triplet, made of three planes in upstream.

0: channel=102 ( $\alpha=-6.5\text{mm}$ )

1: channel=166 ( $\alpha=100\text{mm}$ )

2: channel=48 ( $\alpha=-93\text{mm}$ )

Spacepoint position from maus (local coordinates):  $x = -4.4$ ,  $y = 103.54$ .

$\alpha = (\text{channel-centralfibre}) * 7\text{-way fibre pitch}$

Considering the magnitude of the spacepoint position:

- plane 0 must measure  $\alpha x$  (comparable magnitude).

Now assuming no y-flip (look at picture on slide 2), positive y (around  $x=0$ ) implies positive  $\alpha w$ :

- plane 1 measures  $\alpha w$ .
- plane 2 measures  $\alpha v$ .

For the upstream global mice coordinates should be approx - 6.5mm.

Note there is an x-flip between the global mice coordinates and the upstream tracker coordinates, so local spacepoint x position should be approx +6.5mm