

GBP mechanics @ Infn Padova

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Preliminary design for test beam ... in progress

X axis PI V-408, Y axis Q-545

Vertical stage can be mounted off-axis wrt horizontal one,
in order to equalize/center load distribution, avoid torque
Possible draw back:

V-408 is a magnetic drive, may create some magnetic field

Faraday cage made of bent s.steel (or aluminum) sheet

Air sealing of cage to base plate by means of gasket

May be 3D printed gasket

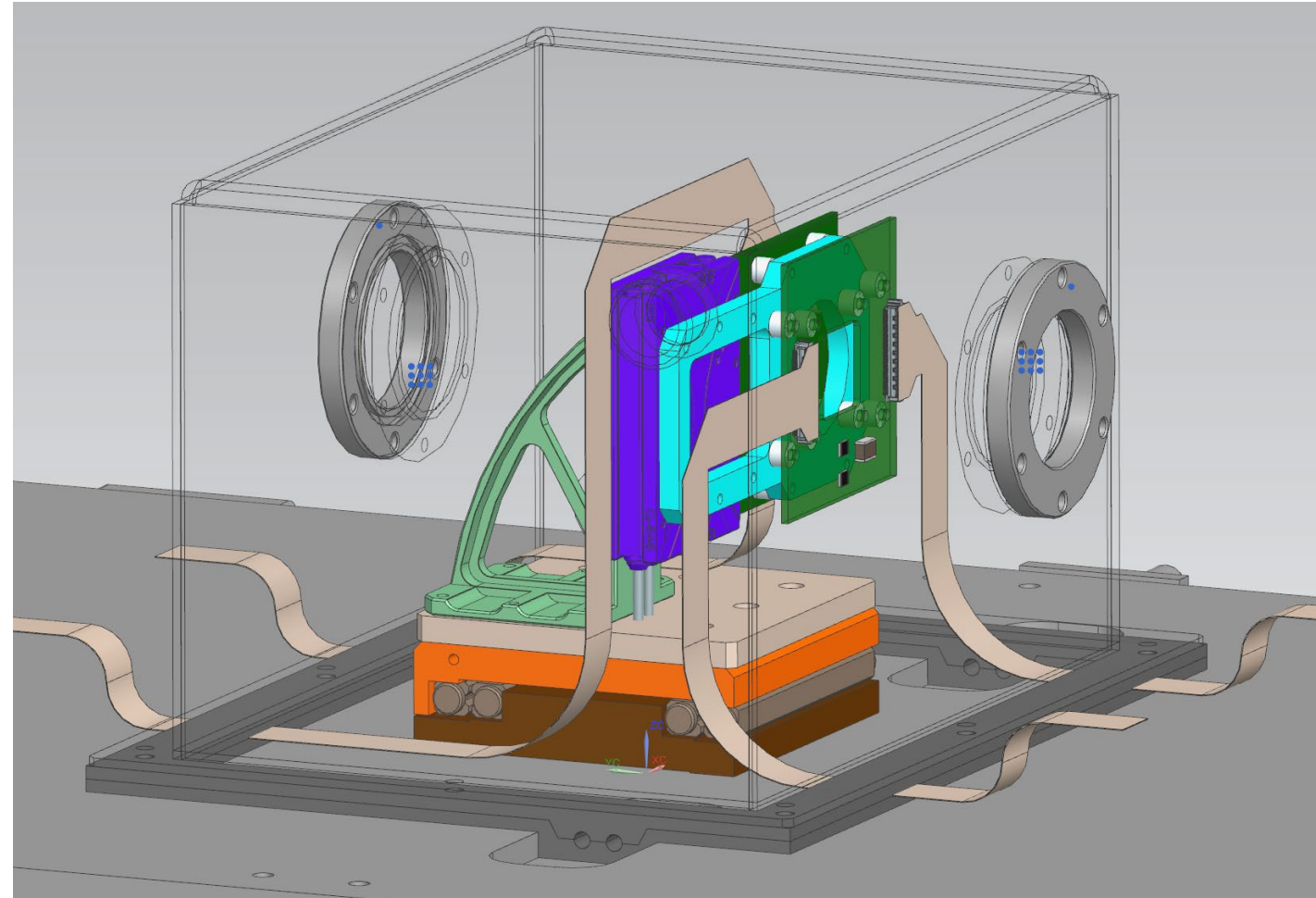
Flat cables compressed between gaskets

(flat cables bent/folded at 45° to get 90° angle and
adequate degree of freedom for movements ..)

Slots in the base plate to pass motors cables (sealed with gasket)

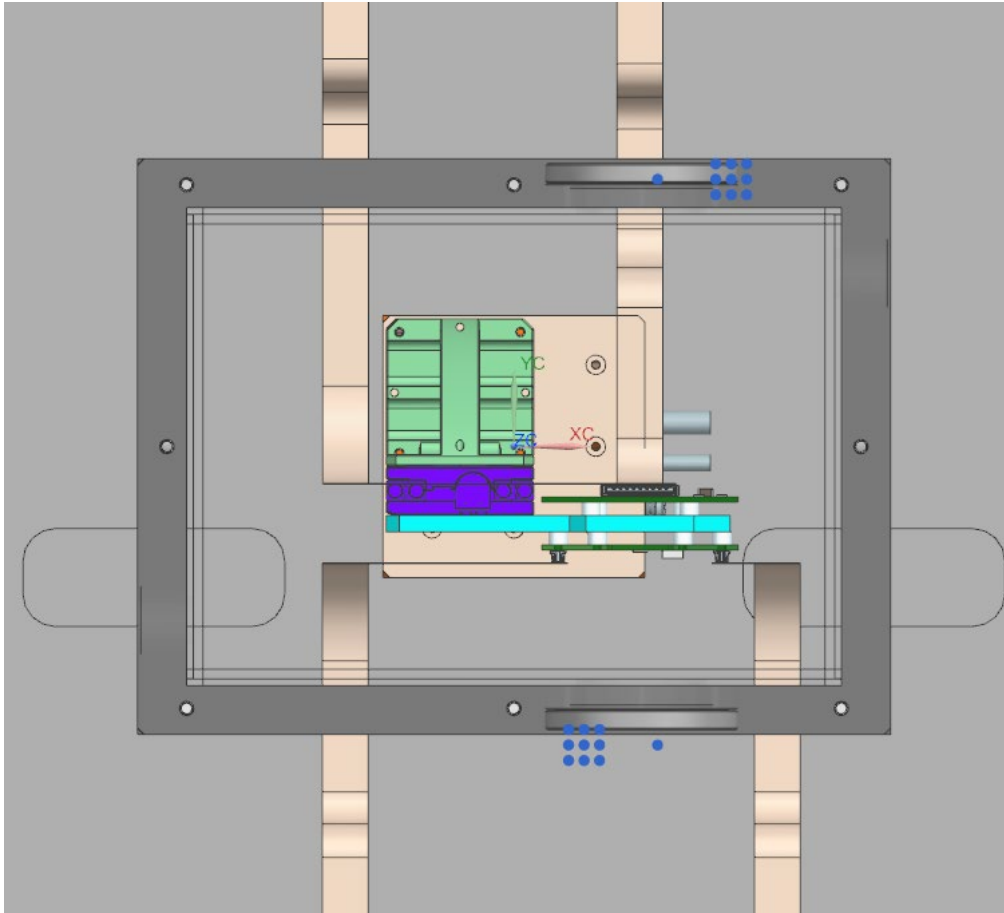
Circular flanges for beam Kapton windows

Dry air or N2 in/out vent ports



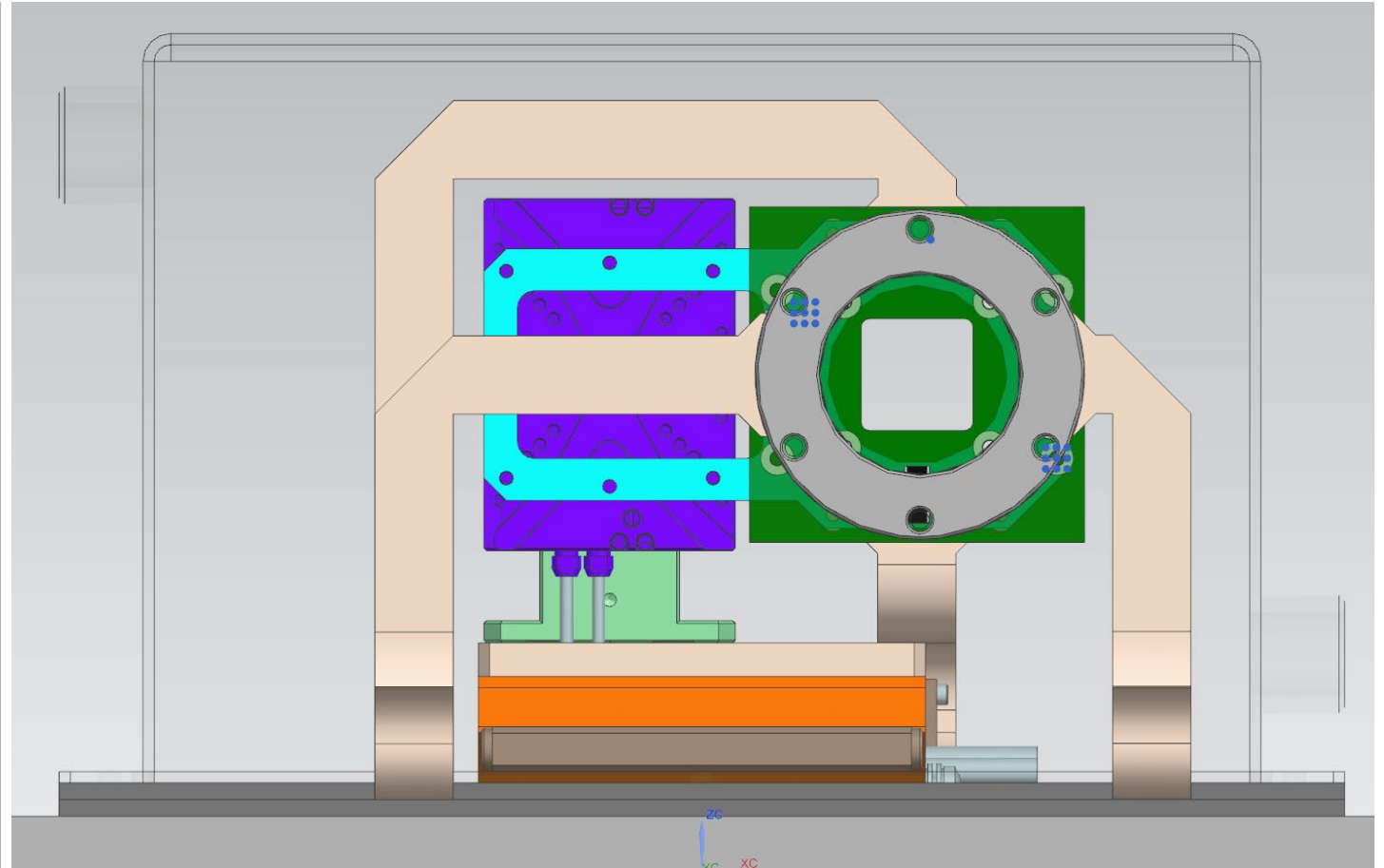
Inputs/comments welcome!

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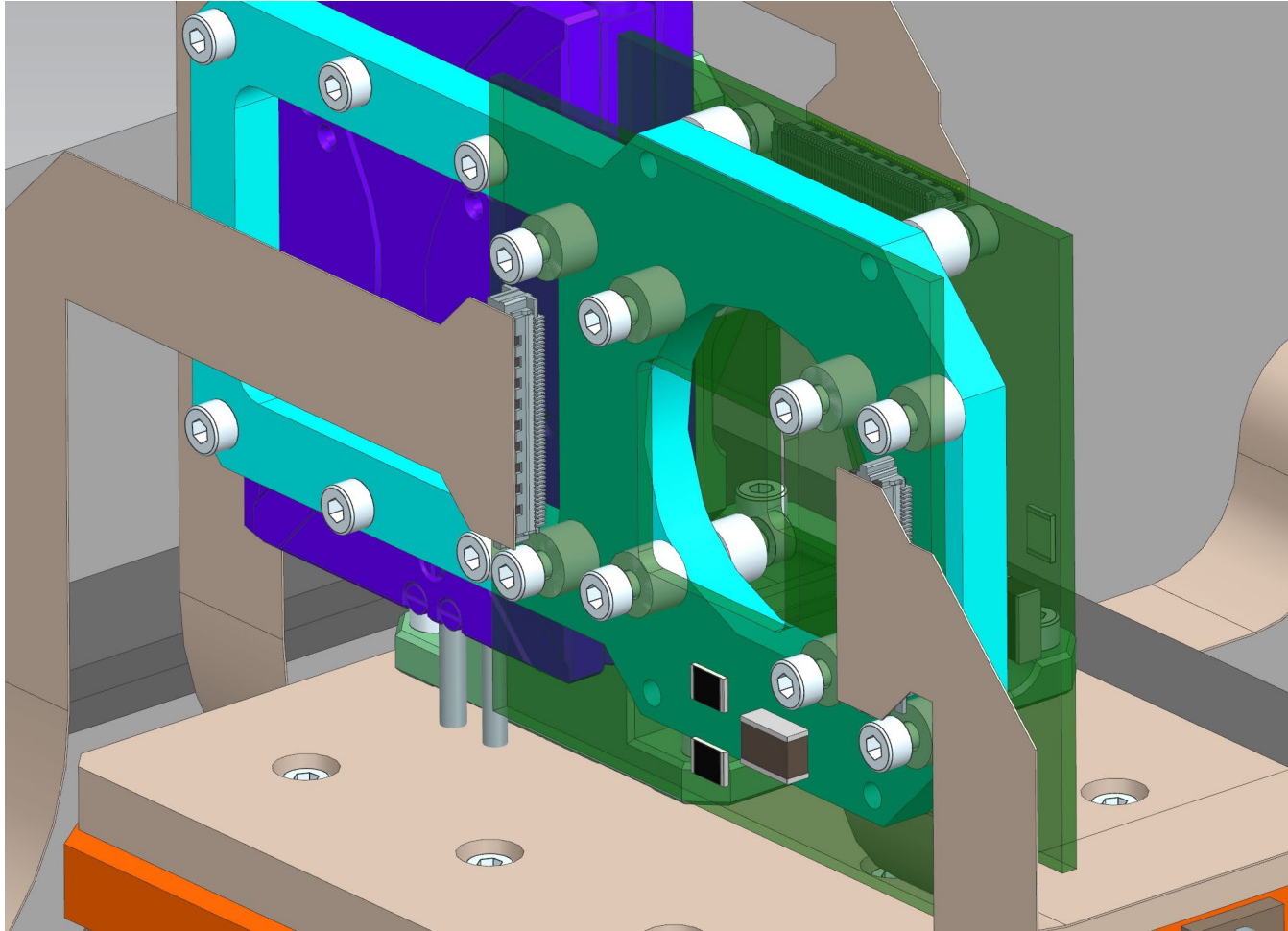
Top view

(cage in transparency)

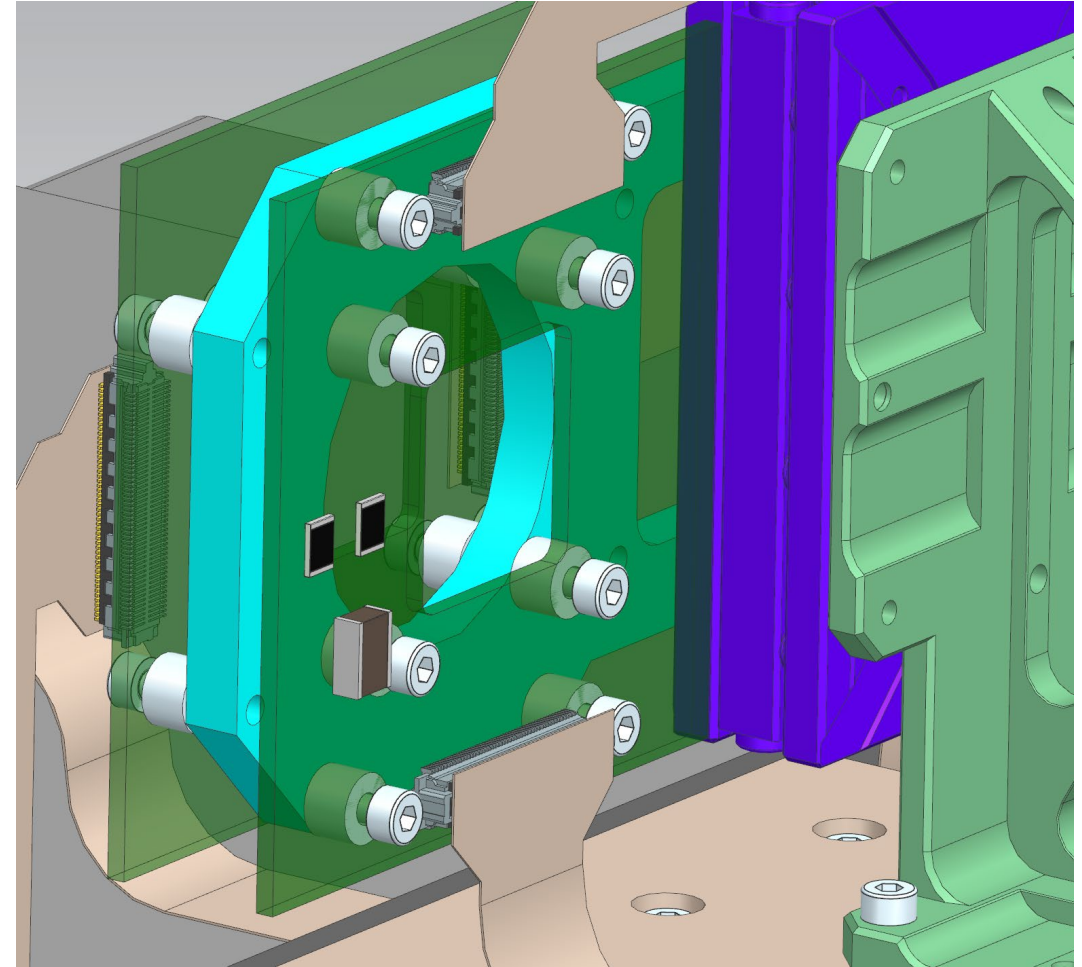


Front view

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“Front” view



“Back” view

Thank you for attention!

~~...Spare slides...~~