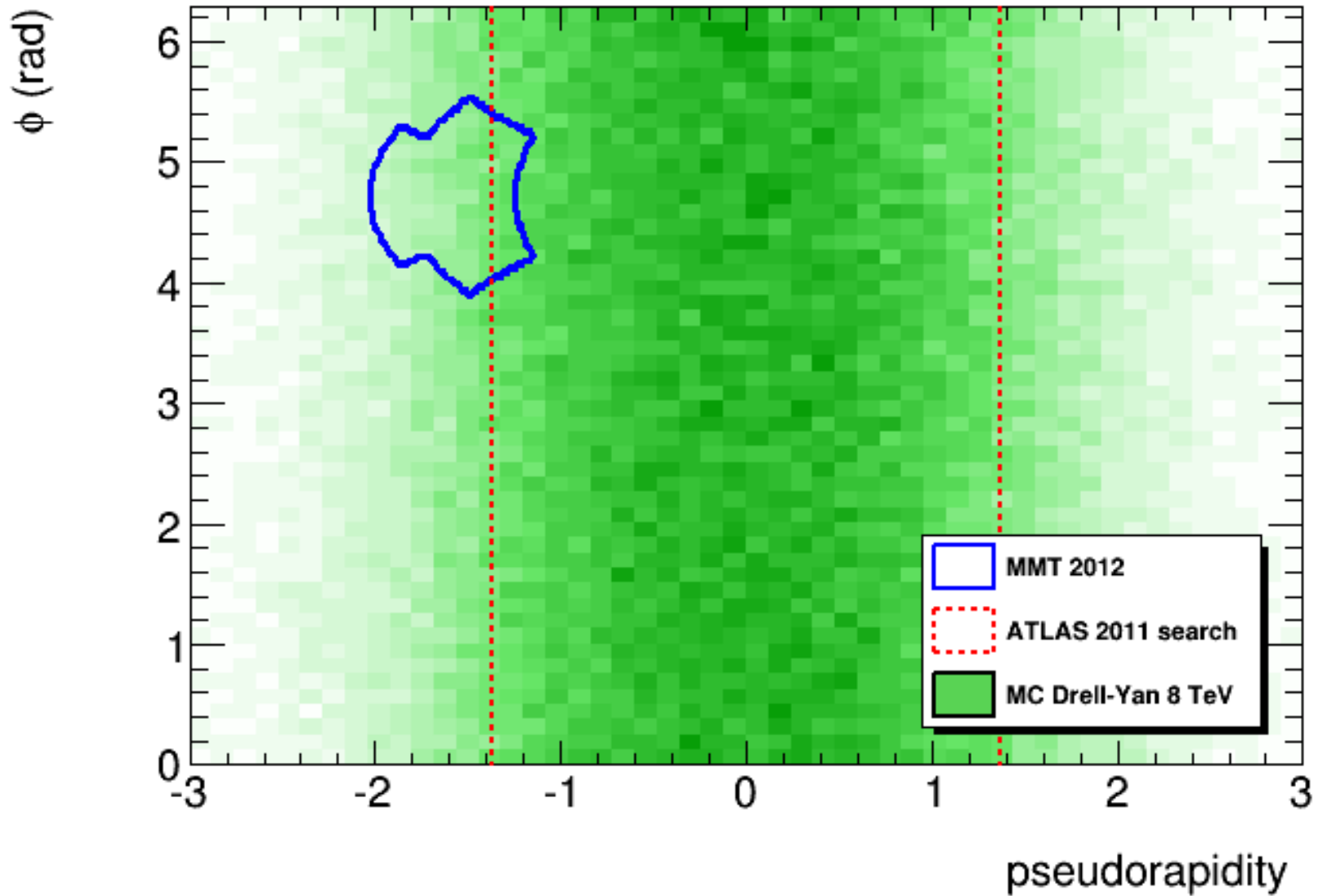# MoEDAL Update

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University of Geneva

Introduction

- The MoEDAL is placed around the LHCb interaction point on the rear side of the detector

- Trying to estimate the amount of material on the back of LHCb to give us an estimate on the trapping potential of MoEDAL
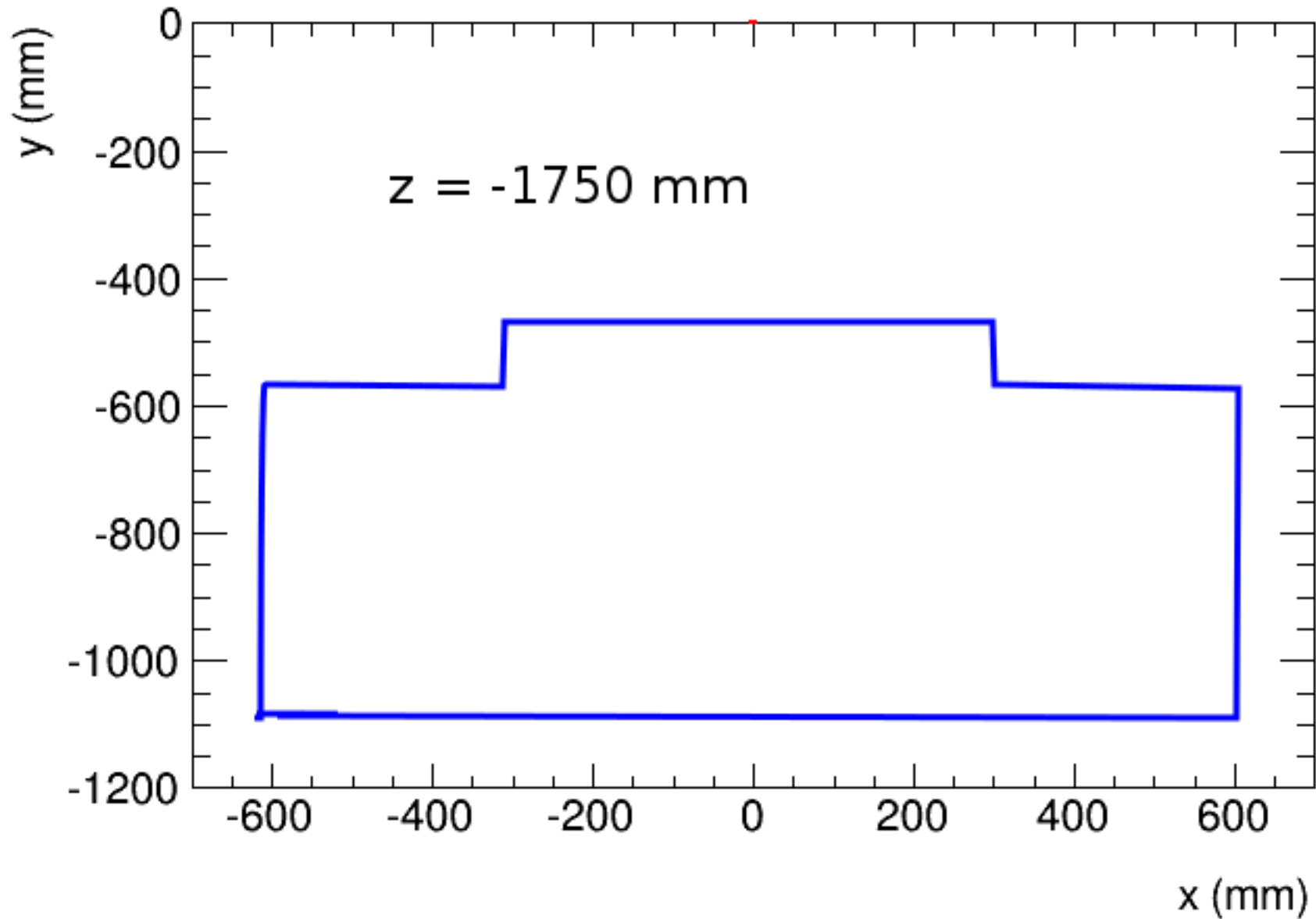
MMT Boxes Placed

Coverage of Test arrays

# Coverage in x-y

z = -1750 mm

LHCb Software

- Using the Panoramix Project from LHCb

- There are ready scripts from LHCb to determine the radiation length of material in the forward region

- These have been modified to apply to the back region as well

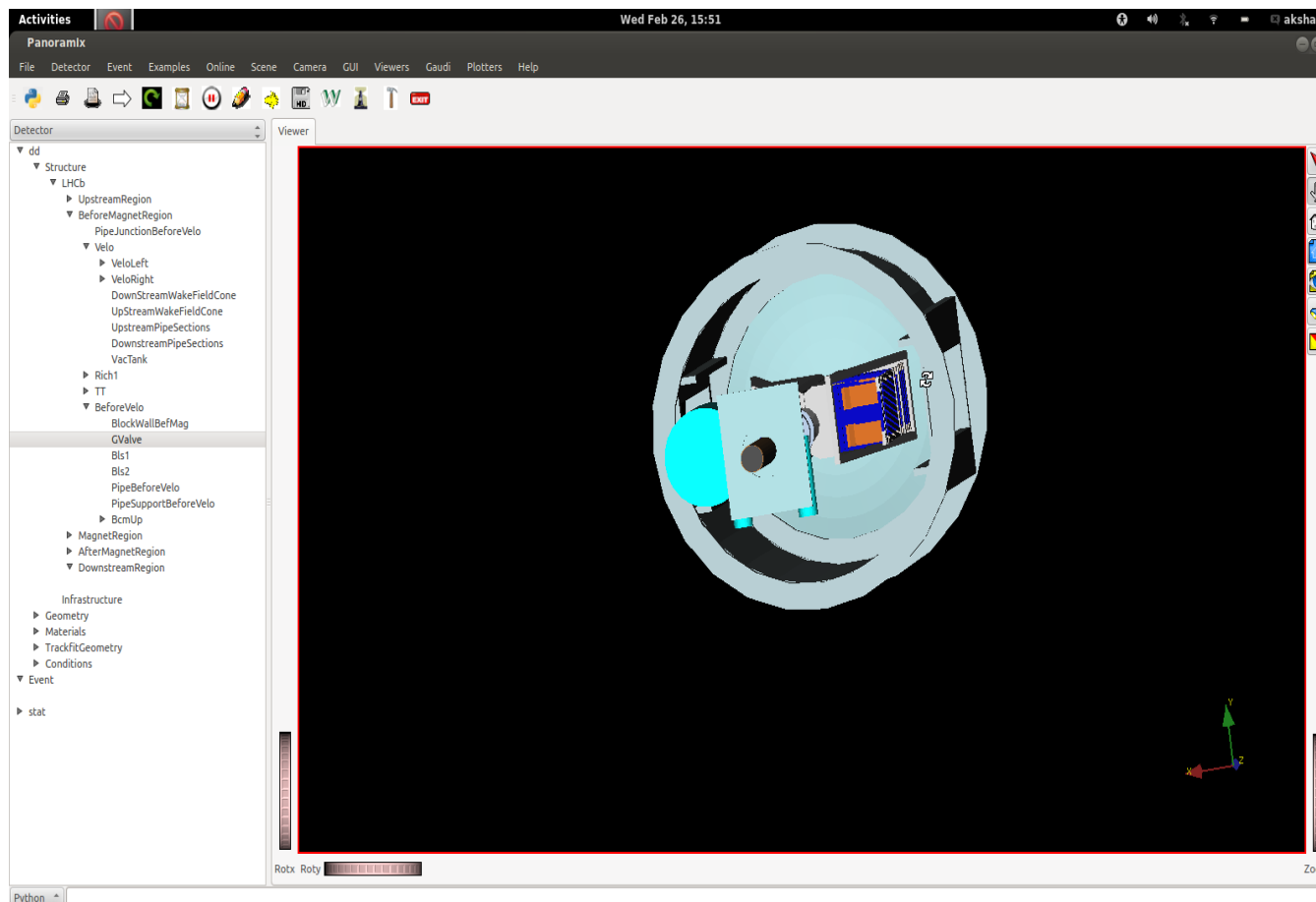- In most cases, python is your friend!

Panoramix GUI – Detector Viewer

- Locally installed Panoramix is better – a little slow over the network on lxplus

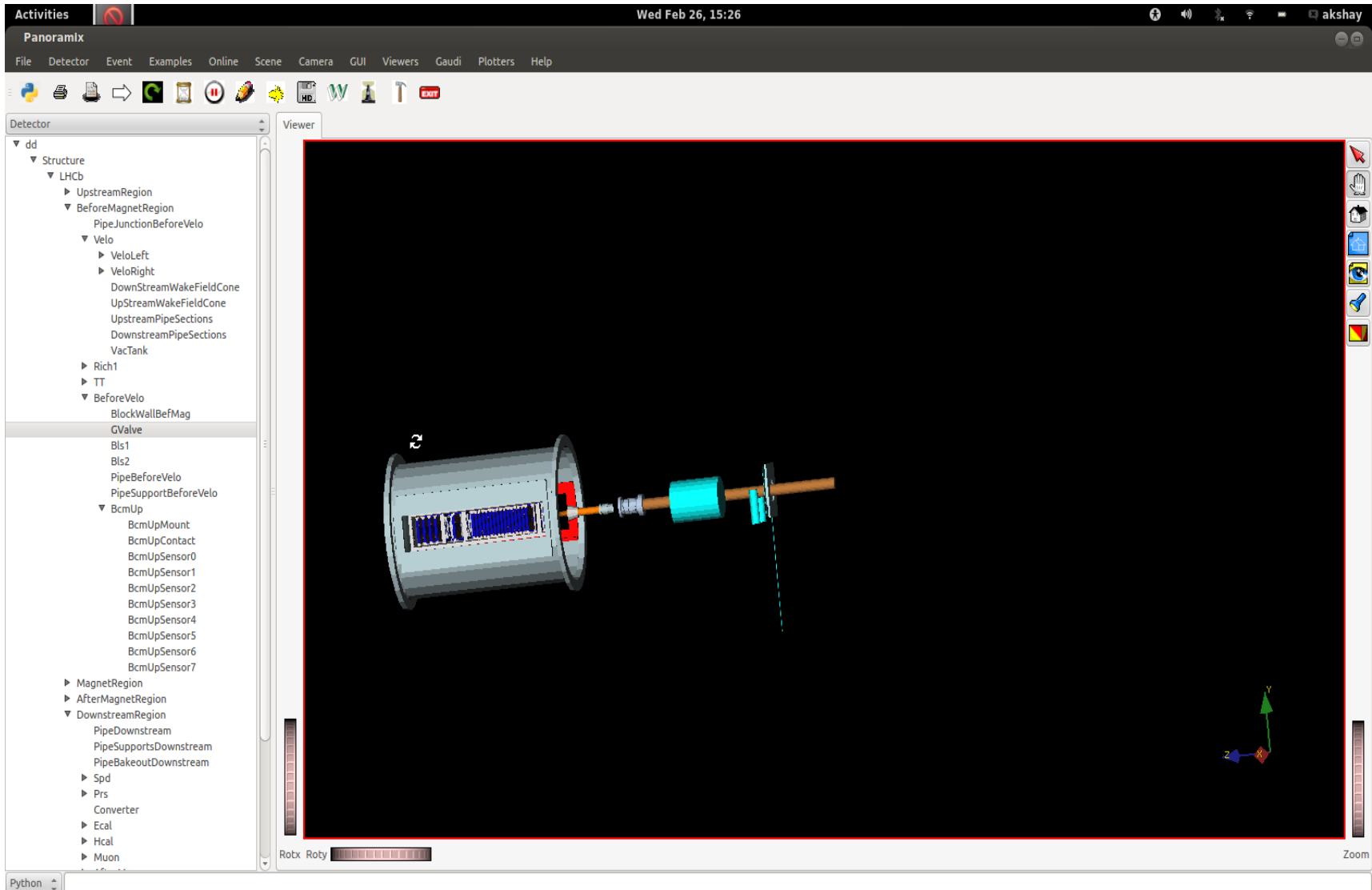- Once installed its fairly easy, have a look at the tutorial here
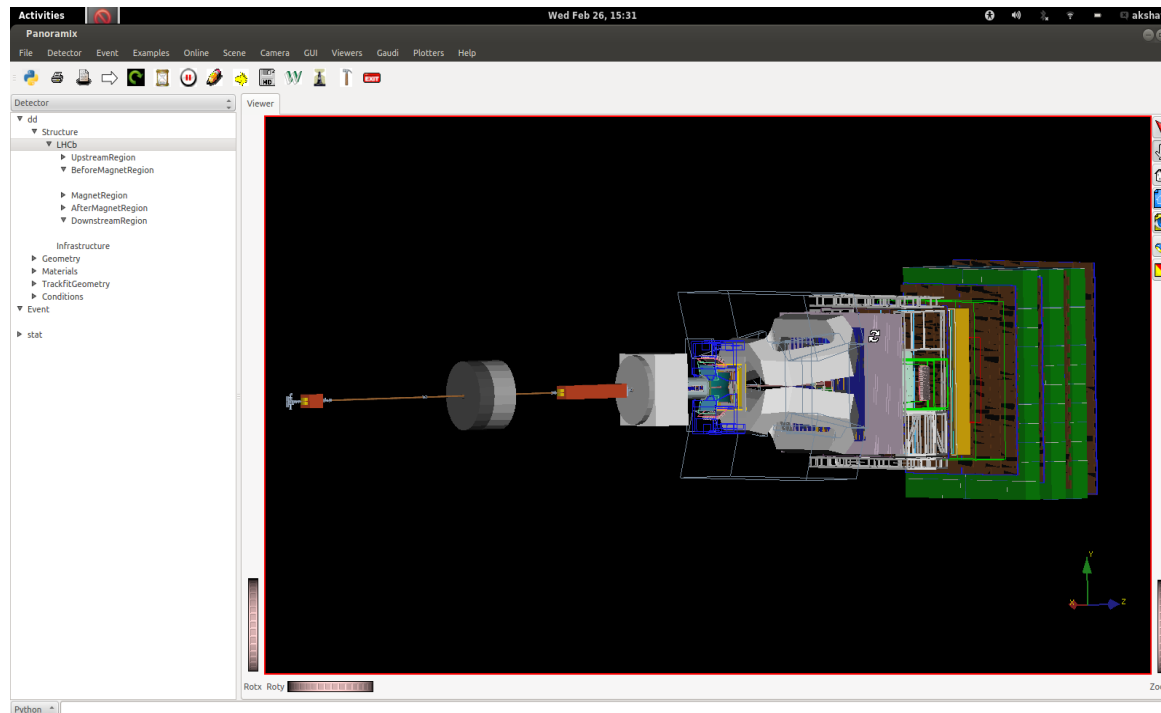
Panoramix GUI contd

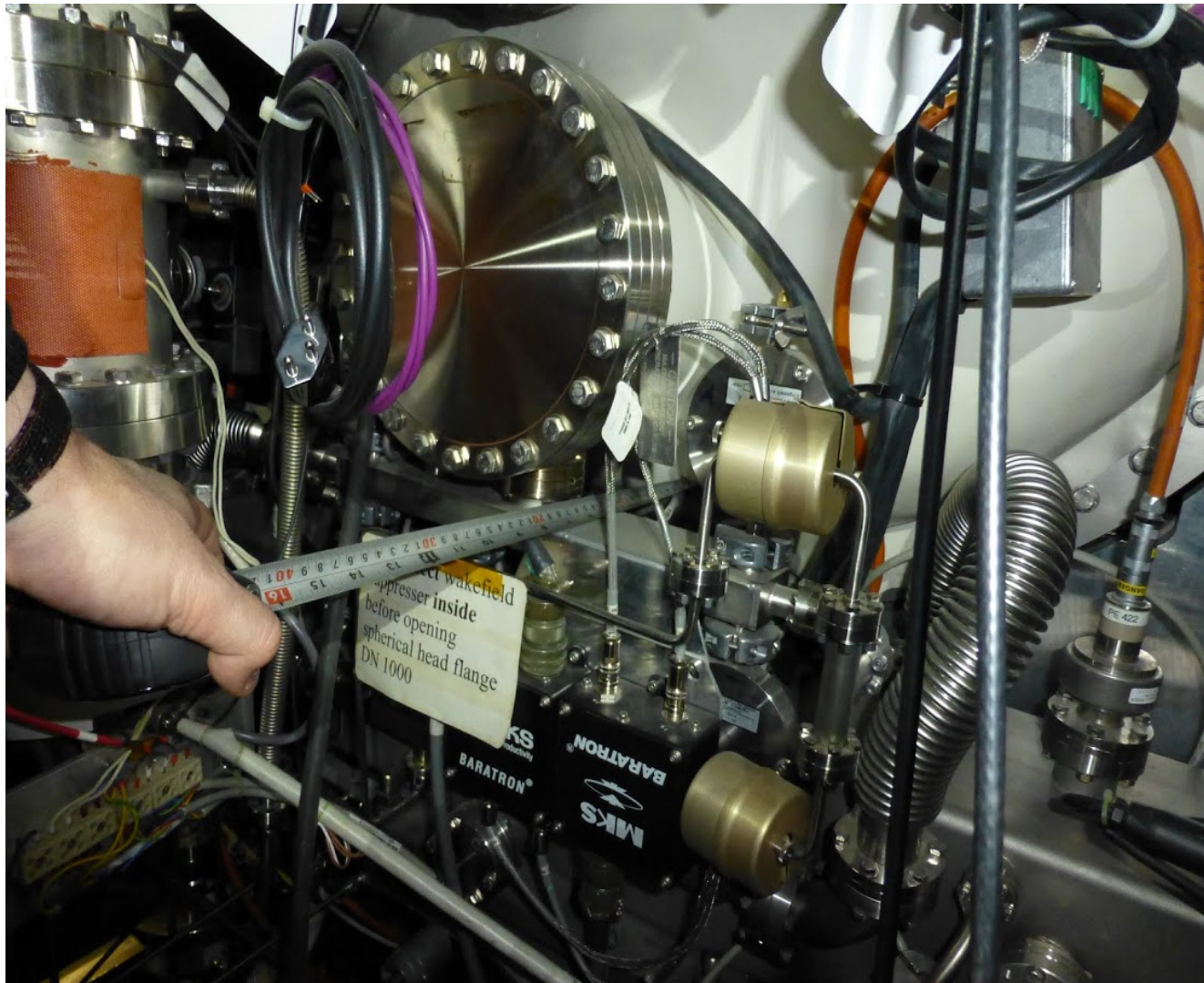- What we see in the GUI is all the information that is present in the database, so

A view from the side
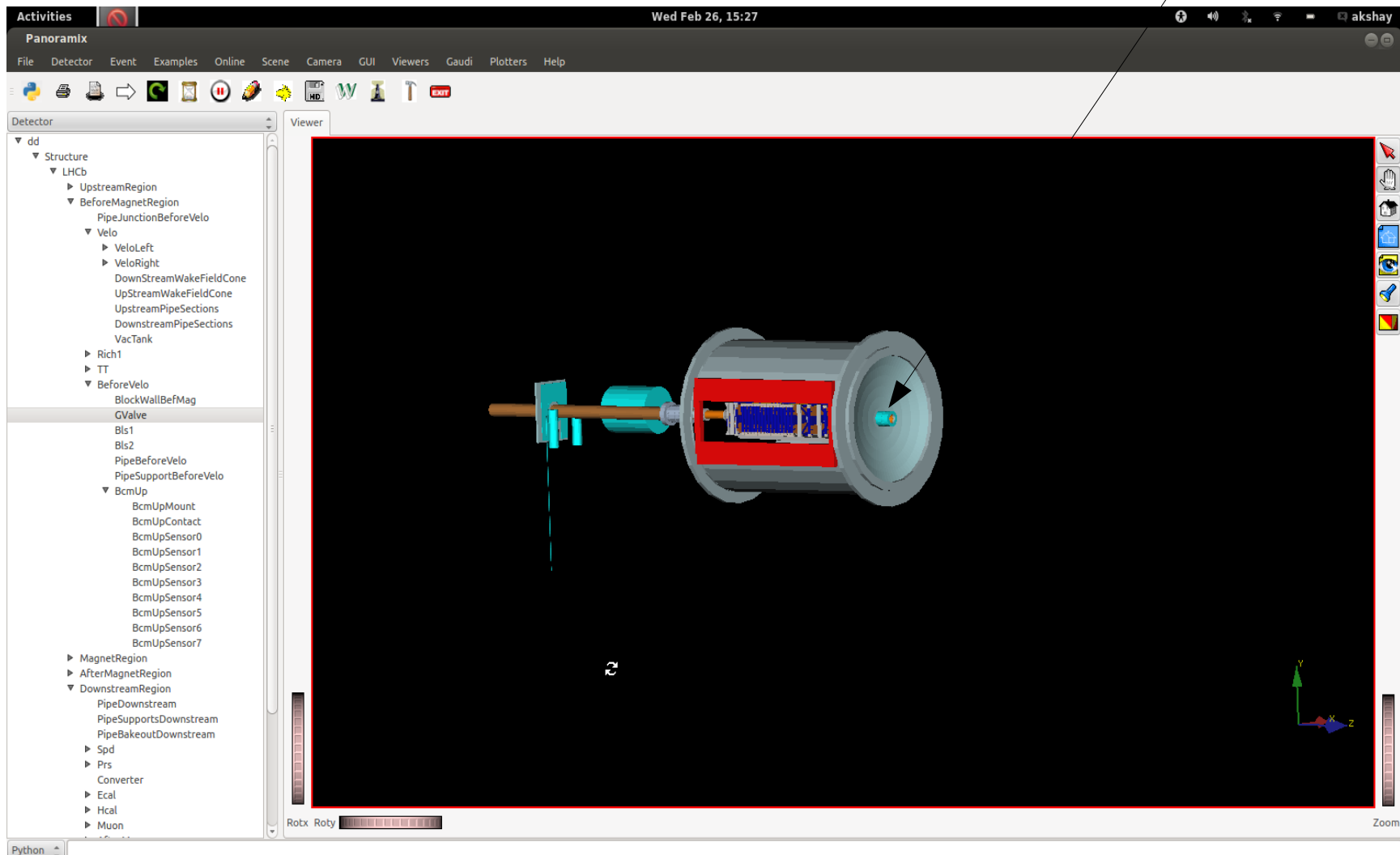
Compare that to

Or this..

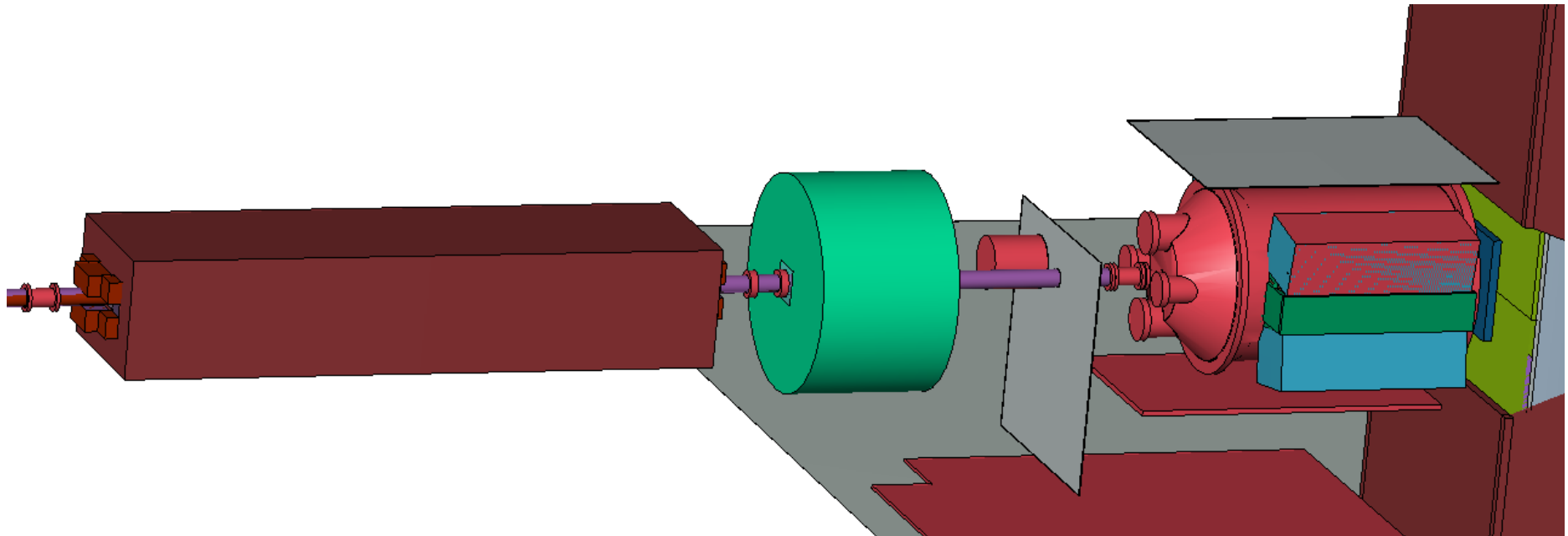# Other missing things

Exit Valve on the detector side
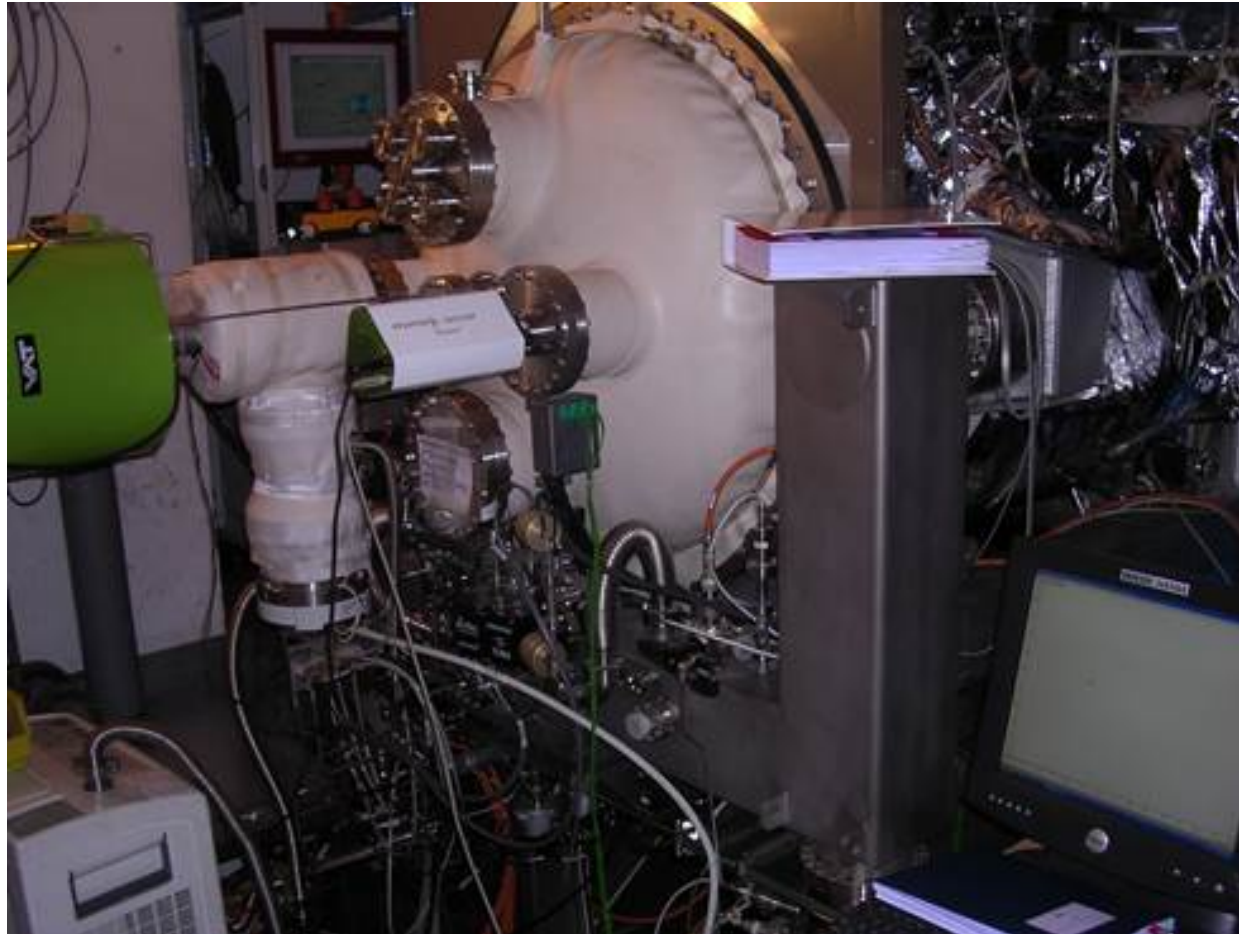

Toward the detector

What we can get

- I got in touch with Matthias Karacson who did some studies for the material around the VELO

- However he used some different software to implement these things, I think Simplegeo and fluka

Extra information on flair

However..

Still some things missing though..

Next steps

- It is not possible to just copy the geometry information into any other MC description.

- This would have to be done by hand

- I've the input file that was used above and we could use flair   http://www.fluka.org/flair/index.html