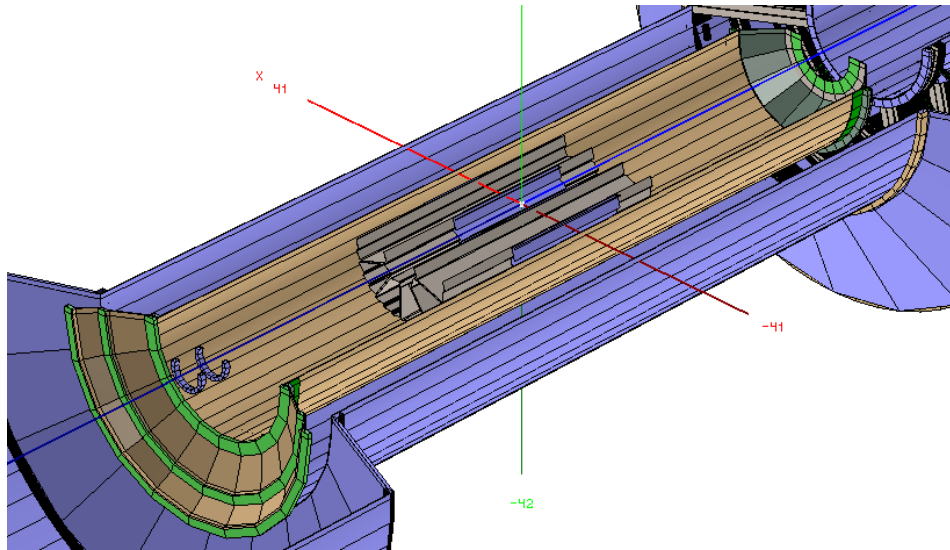
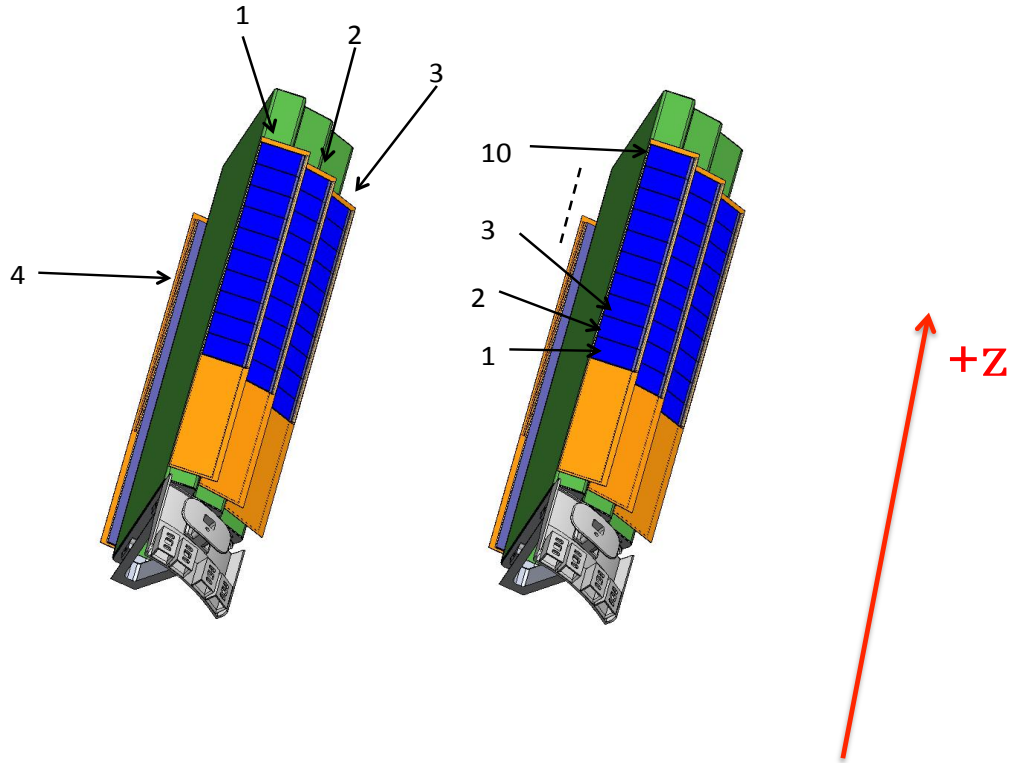


WBS 1.6 Software

1. Further work on the HFT geometry model was done in the reporting period. More detailed structures (the Pixel Support Tube, PST) were added to the model as seen in the figure below (mustard/green structure). Other materials have also been identified to be included in this Y2013 geometry model. Current work is also focused on properly including/accounting of the material budget in the model.



2. Work concerning the numbering conventions of the various HFT components has started and a draft summary document is already in place. The number convention refers to labeling the various detector elements, eg sectors, ladders, wafers, strips or pixels. The STAR general convention and rules were adopted. All three detectors (PIXEL, SSD and IST) were discussed and defined. At the same time the exact position of ladder placement of SSD and IST detectors on the supporting structure was defined taking into account detector symmetries and material distribution. Simulations will be performed in order to estimate the impact of these small phi-rotation of elements on tracking efficiencies as a function of transverse momentum (anticipated to be none or minimal). The figure below is an example of ladder and sensor numbering on a PXL sector.



3. Planning of the upcoming Survey work at LBL (a PXL prototype sector and a SSD ladder) is moving well on both fronts, the need (software goal definition) and method (concerning the actual measurements) with dedicated meetings on the subject. Preliminary documents from various parties are gathered and we expect to create a summary document describing the full, hardware and software, approach to the problem in detail. This will be the basis for an eventual review later this Spring.