

Modelling Update – 03/10/12

Sorry – No picture this week as I was unable to get the model to mesh in time for sending this presentation out!

Update

I've Added a significant number of components

- EMR (Best Guess) <- Really need more information on this component.
- Transformer Wall
- Linac Wall
- TOF Cage Cover
- Trench
- Cellar & Components

Many small changes to dimensions due to double checks etc, although there are a few dimensions within the model that are known to be needed to be changed slightly. (East Wall location, Wall height)

I'm currently sorting out a few intermittent meshing issues that have been created by adding all of these components.

Update

I think there is now enough in the model that I shall be able to produce some preliminary plots along the west wall.

- There is some more geometry to go into the West Wall area but I think it is becoming 'minor' as opposed to 'major'. (Entrance Door, Stairs – the latter of which will probably be moved anyway.)
- Would like to get more geometry in along North Wall this week...

In other news...

- We've ordered a new computer to try and speed up the modelling/solving. We are hopeful that gains of 50-100% could be achieved.
- (Currently taking 1h15mins to model and mesh & 26 hours to solve on current machine)

Update

Last week I discussed a couple of spreadsheets that I'd put together. I've had some feedback on the "Modelling priority list" which is effectively a 'top-level' list of jobs that are needed to be looked by the modelling team.

We (Mike C and myself) are now, at Ken's request, actively looking at how we can take our model to focus in on areas of interest for higher resolution models.

We have got some preliminary information from VF this morning – but we are still digesting it.

- At first glance it looks do-able but it could be fairly involved (as there are a number of steps to get the two models to align) and we need to be able to automate this process.
- We also need to prove the method with a test model. Mike indicated that he would be interested in doing this step and once the method is demonstrated this will provide a mechanism to get others involved with the modelling process.