There is some urgent issue for the Be-target because Hall D engineer and designers are starting to prepare an engineering design for the collimator alcove (location of the Be-target assembly).

We need someone, preferably experienced with GEANT4, to make an estimate of the heat deposition by photon beam in the beryllium target,

tungsten plug and the lead shielding.  Let us suggest that the following needs to be done by that person:

* A simple model in GEANT4 created that has the lead shielding, the beryllium target and the plug implemented in the geometry based on Igor’s sketches
* Use photon beam parameters at the KPT to simulate the energy deposition in these volumes as it was a calorimetry simulation, but no conversion to alight or anything is needed, which makes creation of hits very simple.
* Analyze the results of the simulation and provide the map to the power deposition in Watts versus Z-coordinate along the beam to the engineers in the format they like.
* Work with the engineers performing iterations as they change the material and their thickness around the beamline in KPT by applying these changes to the model and rerunning the simulations.