

CYGNO simulations update

CYGNO simulation working group

07/11/24

Updates from simulation meeting of 28/10

- Copper shielding simulation work in progress (Melba)
 - background from internal layers 0-1 re-evaluated after new ICP-MS measurements → $O(2 \times 10^4)$ evts/year
 - background from layers 2 → $O(10^4)$ evts/year (increasing statistics)
 - background from layers 3 → too few events, increasing statistics
- Next volumes to simulate: field cage and acrylic box
 - simplified CAD received LNF group, working to implement in Geant4
- Digitization updates (Pietro)
 - work in progress: tuning parameters for saturation simulation

Simulation meeting on next Monday 11/11