Update on LUXE GEANT4 Geometry.

Oleksandr Borysov

HICS MC G4 processing status

https://confluence.desy.de/display/LS/GEANT4+MC

IPstrong_V1.1.00 JETI40 e_laser 16.5GeV

МС	# MC out (BX)	Processed (BX)	Location	Notes
w0_100000nm	474	474	/nfs/dust/ilc/user/oborysov/hics_list/list_root_hics_165gev_w0_100000nm.txt	
w0_50000nm	4764	4764	/nfs/dust/ilc/user/oborysov/hics_list/list_root_hics_165gev_w0_50000nm.txt	
w0_20000nm	468	468	/nfs/dust/ilc/user/oborysov/hics_list/list_root_hics_165gev_w0_20000nm.txt	
w0_20000nm	468	468	/nfs/dust/ilc/user/oborysov/hics_list /list_root_hics_165gev_w0_20000nm_mag2t.txt	IP magnet 2T, electrons above 16.2 GeV excluded
w0_20000nm	468	468	/nfs/dust/ilc/user/oborysov/hics_list /list_root_hics_165gev_w0_20000nm_mag2t_all_particles.txt	IP magnet 2T, all primary particles are simulated
w0_10000nm	675	675	/nfs/dust/ilc/user/oborysov/hics_list/list_root_hics_165gev_w0_10000nm.txt	
w0_8000nm	9479	9479	/nfs/dust/ilc/user/oborysov/hics_list/list_root_hics_165gev_w0_8000nm.txt	
w0_3000nm	9508	9508	/nfs/dust/ilc/user/oborysov/hics_list/list_root_hics_165gev_w0_3000nm.txt	
PhII w0_8000nm	941	941	/nfs/dust/ilc/user/oborysov/hics_list /list_root_hics_phase2_165gev_w0_8000nm.txt	
PhII w0_9000nm	951	951	/nfs/dust/ilc/user/oborysov/hics_list /list_root_hics_phase2_165gev_w0_9000nm.txt	

Updates

Test HICS setup options to reduce the background in gamma spectrometer because of initial XFEL electron beam dump:

- Move shielding downstream so that it effectively adds material to the beam dump;
- Change material to lead;
- Implement permanent magnet to deviate the beam downward.

ILC VO grid:

- It seems ok to use it for LUXE, but need to discuss it to confirm;
- Had to adjust wall time to prevent fails;
- Slow rate of downloading.