Update on LUXE GEANT4 Simulation

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LUXE S&A Meeting
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MC	# MC out (BX)	Processed (BX)	Location	Notes
w0_3000nm	910	901	/nfs/dust/luxe/user/oborysov/hics_list /list_root_hics_165gev_w0_3000nm_jeti40_122020_9550dac4.txt	geometry and tree - 9550dac4 (ECal with casing) MC: /nfs/dust/luxe/group/MCProduction/Signal /uncompressed/IPstrong_V1.1.00/JETI40/e_laser /16.5GeV/w0_3000nm
w0_5000nm	986	979	/nfs/dust/ilc/user/oborysov/hics_list /list_root_hics_165gev_w0_5000nm_jeti40_122020_9550dac4.txt	geometry and tree - 9550dac4 (ECal with casing) MC: /afs/desy.de/user/h/hartin/public /IPstrong_V1.1.00/JETI40/e_laser/16.5GeV /w0_5000nm
w0_8000nm	986	965	/nfs/dust/ilc/user/oborysov/hics_list /list_root_hics_165gev_w0_8000nm_jeti40_122020_9550dac4.txt	geometry and tree - 9550dac4 (ECal with casing) MC: /afs/desy.de/user/h/hartin/public /IPstrong_V1.1.00/JETI40/e_laser/16.5GeV /w0_8000nm
w0_10000nm	994	972	/nfs/dust/luxe/user/oborysov/hics_list /list_root_hics_165gev_w0_10000nm_jeti40_122020_9550dac4.txt	geometry and tree - 9550dac4 (ECal with casing) MC: /nfs/dust/luxe/group/MCProduction/Signal /uncompressed/IPstrong_V1.1.00/JETI40/e_laser /16.5GeV/w0_10000nm
w0_20000nm	993	978	/nfs/dust/luxe/user/oborysov/hics_list /list_root_hics_165gev_w0_20000nm_jeti40_122020_9550dac4.txt	geometry and tree - 9550dac4 (ECal with casing) MC: /nfs/dust/luxe/group/MCProduction/Signal /uncompressed/IPstrong_V1.1.00/JETI40/e_laser /16.5GeV/w0_20000nm
w0_50000nm	990	967	/nfs/dust/luxe/user/oborysov/hics_list /list_root_hics_165gev_w0_50000nm_jeti40_122020_9550dac4.txt	geometry and tree - 9550dac4 (ECal with casing) MC: /nfs/dust/luxe/group/MCProduction/Signal /uncompressed/IPstrong_V1.1.00/JETI40/e_laser /16.5GeV/w0_50000nm
w0_100000nm	994	959	/nfs/dust/luxe/user/oborysov/hics_list /list_root_hics_165gev_w0_100000nm_jeti40_122020_9550dac4.txt	geometry and tree - 9550dac4 (ECal with casing) MC: /nfs/dust/luxe/group/MCProduction/Signal /uncompressed/IPstrong_V1.1.00/JETI40/e_laser /16.5GeV/w0_100000nm

Fast background simulation

Background 16.5 GeV

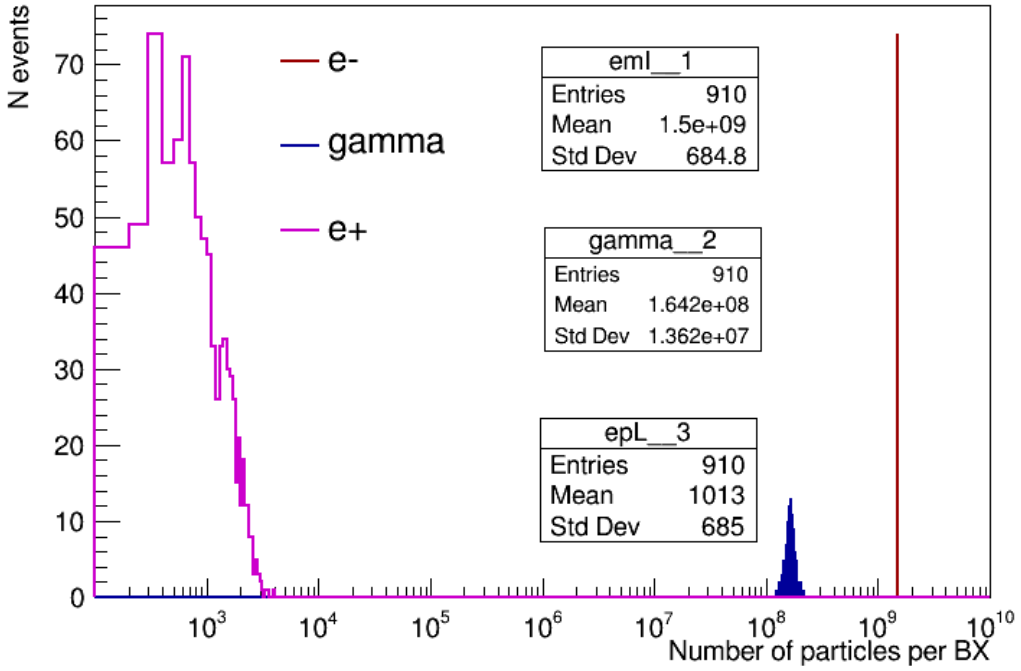
Simulation	# particles	Processed (BX)	Location	Notes
Electron background for electron-laser setup	1.89e9	1.259	/nfs/dust/luxe/group/MCProduction/Background/elaser/29102020_lx86a1/Merged/Files/	Setup corresponds to commit 86a153 (hics branch)
Background for gamma-laser setup	7.53e9	5.022	/nfs/dust/luxe/group/MCProduction/Background/gammalaser/09102020_lxb18e/Merged/Files	Setup corresponds to commit b18e55ec (master branch)
Electron background for electron-laser setup, fast simulation	5.642e10	37.6	/nfs/dust/ilc/user/oborysov/runjlx/hics/list_root_hics_background_fast_6ac6fb40.txt	Setup corresponds to commit 6ac6fb40 of hics_fast branch. Particle tracking is stopped when it crosses any of beam dump or shielding volumes.
Electron background for electron-laser setup, fast simulation updated ECal geometry	2.3983e11	159.89	/nfs/dust/ilc/user/oborysov/hics_list/list_root_hics_background_fast_c99bba6d_0_18_luxe.txt	Setup corresponds to commit c99bba6d of hics_fast branch, ECal has stainless casing. Particle tracking is stopped when it crosses any of beam dump or shielding volumes.
Background for gamma-laser setup, fast simulation updated ECal geometry	4.559e10	30.39	/nfs/dust/luxe/user/oborysov/hics_list/list_root_bppp_background_fast_04012021_0_3.txt	ECal has stainless casing. Particle tracking is stopped when it crosses Shielding, BeamDumpAssembly, GammaBeamDumpAssembly

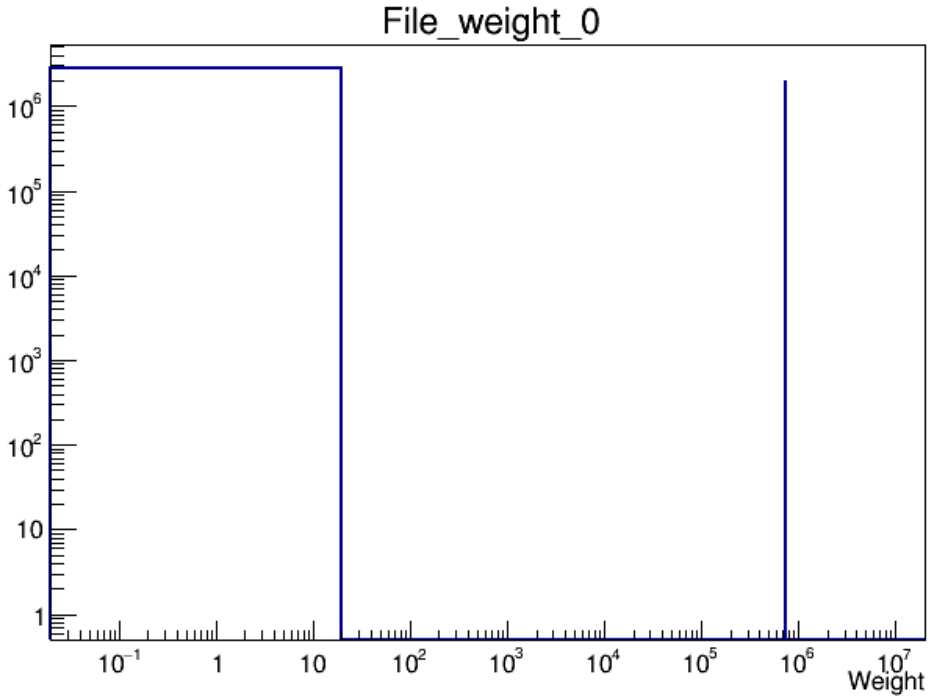
e-gamma MC 3um

Run ID	Electrons	Electron MP	Photon	Photon MP	Positron	Positron MP	Total MP
run_364	1500000010	2010	156000009	227	10	10	2247
run_590	1500003935	5935	167999675	3834	3935	3935	13704

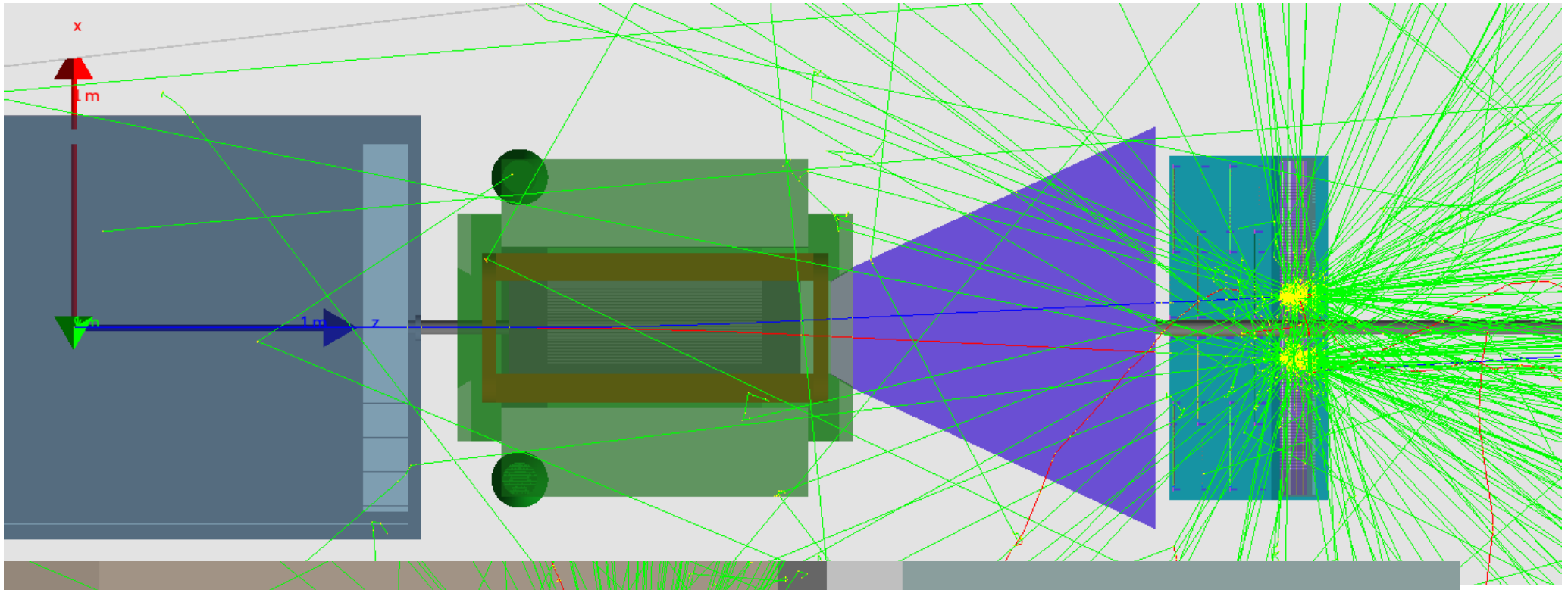
e_laser_JETI40_16.5GeV_0.8Jpulse_3000.0nm_w0_4000_zmsh_2000_nmp_Ipstrong_V1.1.00_run_363_particles.out
e_laser_JETI40_16.5GeV_0.8Jpulse_3000.0nm_w0_4000_zmsh_2000_nmp_IPstrong_V1.1.00_run_590_particles.out

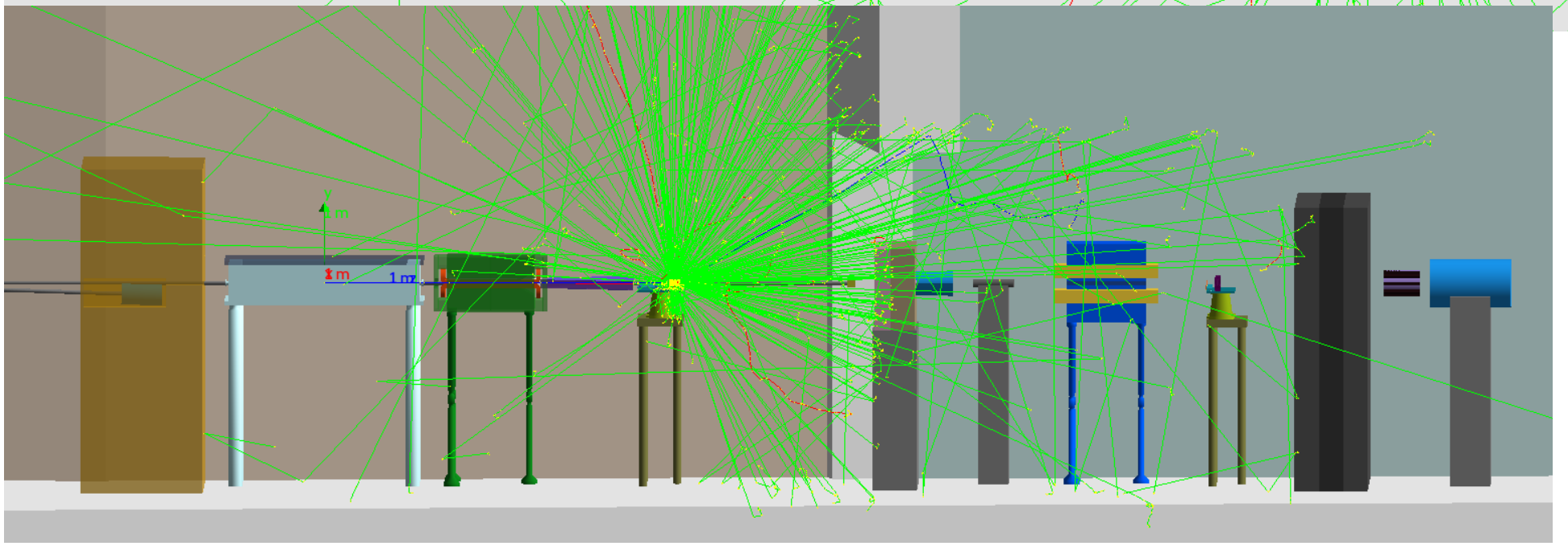
located in /nfs/dust/luxe/group/MCProduction/Signal/uncompressed/IPstrong_V1.1.00/JETI40/e_laser/16.5GeV/w0_3000nm





Gamma laser setup. 10 GeV e-, e+





Gamma laser setup. 10 GeV e-, e+