

Status of the Monte Carlo production

Ivan Marchesini, DESY, 2008-05-07

Status

- ▶ All non-tau SM Slac files, including the new sample for $M_h = 2000$ GeV, have been copied here at Desy.
- ▶ Slac Tau sample and $M_h = 120$ GeV sample, should be completed this week.
- ▶ Processes already simulated for Mokka 06-06:
 - ▶ Calibration and tests (both LDC and LDCPrime):
 - Zpole uds (generator files from Cambridge);
 - Single particles (Pythia, Slac);
 - udsc at 500 GeV (Whizard, Slac);
 - ttbar and uds at 500 GeV without ISR (Pythia);
 - ▶ Processes for analysis (only LDC):
 - aa_cc, n1n1a, qq ν_l at 500 GeV (Whizard, Slac);
- ▶ Start soon standard reconstruction of these files.

Simulated files available

<http://www-flc.desy.de/simulation/databasesimulation/>. Easy links to access the latest productions, otherwise use search engine.

International Linear Collider Simulations Database

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Search Database

PARAMETER	INPUT	EXAMPLE
		Ongoing productions with the new detector models:
		• ZPole_LDC01_06Sc_p01 ZPole to uds. Files from Cambridge.
		• ZPole_LDCPrime_02Sc_p01 ZPole to uds. Files from Cambridge.
		• Old_database_LDCPrime_02Sc_p01 Noisr files from the old database.
		• Old_database_LDC01_06Sc_p01 Noisr files from the old database.
		• SinglePar_LDC01_06Sc_p01 Single particles.
		• SinglePar_LDCPrime_02Sc_p01 Single particles.
		• Slac_SM_LDC01_06Sc_p01

Tag:

Done

Computing elements monitoring - 1

<http://www-flc.desy.de/simulation/databasesimulation/CEmonitor.php> monitor of the CEs working.

Monitor of the Computing Elements

Computing elements in which jobs have been running, with the corresponding number of successes and failures. The last column reports the date of the last job submission to the computing element. Only the CEs with enough CPU and Wall Clock Time have been considered. Some of the computing elements have already been excluded (struck-through lines). The CEs marked in blue are those in which the jobs are still submitted (CEs where the number of successes reported is higher than the number of failures; CEs not enough tested yet). For the latest jobs the reason of the failure has been added in the last columns.

Computing element	Number of successes	Number of insuccesses	Last date of submission	Aborted	Job waiting or scheduled too long	Output exists	Copying the mokka package failed	Copying the input file failed	Copying the geant data failed
lcgce02.gridpp.rl.ac.uk:2119/jobmanager-lcgpbs-grid500M	14	12	2008-05-05 15:30:28	0	0	0	0	0	1
heplnx206.pp.rl.ac.uk:2119/jobmanager-lcgpbs-ile	40	33	2008-04-29 16:19:10	22	0	0	0	0	0
lcfgng.es.tau.ac.il:2119/jobmanager-pbs-ile	0	8	2008-04-23 20:35:14	0	0	0	0	0	0
antaeus.hpcc.ttu.edu:2119/jobmanager-lsf-receiveq	0	7	2008-04-24 05:16:00	0	0	0	0	0	0

- Number of successes;
- Number of failures;
- Reasons of failure (introduced only for the latest jobs).

- CE still used;
- CE gives more failures;
- CE gives more successes;
- Struck-through = no more used.

Computing elements monitoring - 2

At the bottom of the page summary. Using only the green CEs would currently give ~76% efficiency. The new monitor of the failure causes, will help the optimal selection of the CEs to be used (working only since the latest jobs, still small statistic).

Monitor of the CEs - Mozilla Firefox									
File Edit View History Bookmarks Tools Help									
http://www-flc.desy.de/simulation/databasesimulation/CEmonitor.php									
Getting Started Latest Headlines									
polgrid1.in2p3.fr:2119/jobmanager-pbs-ile	10	1	2008-04-29 15:50:08	1	0	0	0	0	0
node07.datagrid cea.fr:2119/jobmanager-lcgpbs-ile	9	0	2008-04-29 10:17:39	0	0	0	0	0	0
grid10.lal.in2p3.fr:2119/jobmanager-pbs-ile	12	2	2008-04-29 15:42:32	1	0	0	0	0	0
fal-pygrid-18.lanacs.ac.uk:2119/jobmanager-lcgpbs-ile	8	2	2008-05-05 15:37:35	2	0	0	0	0	0
dgc-grid-40.brunel.ac.uk:2119/jobmanager-lcgpbs-ile	3	6	2008-04-29 14:08:39	0	0	0	0	1	0
Total	361	601	37.525987525988 %	53	9	0	0	2	1
Total green	349	107	76.535087719298 %	44	0	0	0	0	1
Total Selected	361	188	65.755919854281 %	53	9	0	0	2	1
	Number of successes	Number of insuccesses		Aborted	Job waiting or scheduled too long	Output exists	Copying the mokka package failed	Copying the input file failed	Copying the geant data failed

Computing elements monitoring - 3

- ▶ The CEs in which currently we have more successes are those from the three areas:
 - Desy (Hamburg and Zeuthen);
 - Great Britain;
 - France.
- ▶ If this CEs should keep stable, they might be enough for the mass production (currently they are ~10).
- ▶ If they should not keep stable understand, using also the new monitor of the failure causes, how to increase the efficiency also in other CEs. Ideas:
 - use also secondary SEs in case of unavailability of the Desy one;
 - replicate the input files needed for the simulation in other SEs.
- ▶ Reconstruction jobs will be run locally in the Desy CE (it would take more time to transfer the input Mokka files -> use preload).

Some numbers LDC

Process	Minutes per event	N files	N events	Time simulation (min)	
gamma_Theta1-179_5GeV	0.02844	10	10000	284.4	
gamma_Theta1-179_50GeV	0.21672	10	10000	2167.2	Total events 511000
gamma_Theta1-179_2GeV	0.01177	10	10000	117.7	Total files 658
gamma_Theta1-179_20GeV	0.08784	10	10000	878.4	
gamma_Theta1-179_10GeV	0.05395	10	10000	539.5	Total time hours 4224.75
gamma_Theta1-179_100MeV-10GeV	0.02270	10	10000	227	
gamma_Theta1-179_100GeV	0.43764	10	10000	4376.4	
eta_gammagamma_Theta4-176_1-50GeV	0.11201	10	10000	1120.1	
Z0_Theta90_10-250GeV	0.74710	10	10000	7471	
K_Theta4-176_1-50GeV	0.08405	10	10000	840.5	
K0L_Theta1-179_100MeV-10GeV	0.02899	10	10000	289.9	
muon_Theta1-179_1-50GeV	0.00494	10	10000	49.4	
muon_Theta1-179_100GeV	0.00900	10	10000	90	
muon_Theta1-179_10GeV	0.00404	10	10000	40.4	
muon_Theta1-179_1GeV	0.00368	10	10000	36.8	
muon_Theta1-179_20GeV	0.00496	10	10000	49.6	
muon_Theta1-179_2GeV	0.00247	10	10000	24.7	
muon_Theta1-179_50GeV	0.00508	10	10000	50.8	
muon_Theta1-179_5GeV	0.00393	10	10000	39.3	
muon_Theta1-40_1-50GeV	0.00498	10	10000	49.8	
muon_Theta6-16_1-50GeV	0.00339	10	10000	33.9	
n_Theta1-179_100MeV-10GeV	0.01589	10	10000	158.9	
nbar_Theta1-179_100MeV-10GeV	0.01932	10	10000	193.2	
p_Theta4-176_1-50GeV	0.05533	10	10000	553.3	
pi0_Theta1-179_100MeV-10GeV	0.01891	10	10000	189.1	
pi0_Theta4-176_1-10GeV	0.02018	10	10000	201.8	
pi0_Theta4-176_10-100GeV	0.19373	10	10000	1937.3	
ZPoleuds	0.49889	10	10000	4988.9	
udsc (500 Whizard)	2.14196	50	10000	21419.6	
n1n1a (500 Whizard)	0.19383	20	100000	19383	
aa_cc (500 Whizard)	1.41658	198	99000	140241.42	
tbar_6jets (500 noisr Pythia)	2.83726	25	5000	14186.3	
dus (500 noisr Pythia)	2.73840	25	5000	13692	
n1e1sc (500 GeV Whizard)	1.75212	15	3000	5256.36	
cse1n1 (500 GeV Whizard)	1.47278	5	1000	1472.78	
n1e1du (500 GeV Whizard)	1.61376	15	3000	4841.28	
ude1n1 (500 GeV Whizard)	0.99291	5	1000	992.91	
n2e2du (500 GeV Whizard)	1.10184	10	2000	2203.68	
n2e2sc (500 GeV Whizard)	1.39826	10	2000	2796.52	

LCPhys list

Some numbers LDCPrime

Process	Minutes per event	N files	N events	Time simulation (min)	
gamma_Theta1-179_5GeV	0.0217	10	10000	217.2	
muon_Theta1-179_100GeV	0.0099	10	10000	99.3	Total events 300000
K0L_Theta1-179_100MeV-10GeV	0.0246	10	10000	246.4	Total files 380
K_Theta4-176_1-50GeV	0.0700	10	10000	699.5	
Z0_Theta90_10-250GeV	0.8505	10	10000	8505.4	Total time hours 1458.65
eta_gammagamma_Theta4-176_1-50GeV	0.1245	10	10000	1245.2	
gamma_Theta1-179_100GeV	0.4333	10	10000	4333.3	LDC+LDCPrime
gamma_Theta1-179_100MeV-10GeV	0.0212	10	10000	211.8	Total events 811000
gamma_Theta1-179_10GeV	0.0606	10	10000	605.5	Total files 1038
gamma_Theta1-179_20GeV	0.1049	10	10000	1048.5	
gamma_Theta1-179_2GeV	0.0100	10	10000	100.2	Total time hours 5683.4
gamma_Theta1-179_50GeV	0.2525	10	10000	2525	
muon_Theta1-179_1-50GeV	0.0059	10	10000	59.3	
muon_Theta1-179_10GeV	0.0047	10	10000	46.9	
muon_Theta1-179_1GeV	0.0033	10	10000	32.8	
muon_Theta1-179_20GeV	0.0038	10	10000	37.8	
muon_Theta1-179_2GeV	0.0026	10	10000	25.7	
muon_Theta1-179_50GeV	0.0057	10	10000	57.1	
muon_Theta1-179_5GeV	0.0036	10	10000	35.8	
muon_Theta1-40_1-50GeV	0.0040	10	10000	40.1	
muon_Theta6-16_1-50GeV	0.0041	10	10000	41.3	
n_Theta1-179_100MeV-10GeV	0.0260	10	10000	260.1	
nbar_Theta1-179_100MeV-10GeV	0.0327	10	10000	327.4	
p_Theta4-176_1-50GeV	0.0836	10	10000	835.8	
pi0_Theta1-179_100MeV-10GeV	0.0308	10	10000	308.4	
pi0_Theta4-176_1-10GeV	0.0302	10	10000	302.3	
pi0_Theta4-176_10-100GeV	0.2856	10	10000	2856.1	
Zpoleuds (LDC)	0.5914	10	10000	5914.3	
Udsc 500 GeV Whizard (LDC 2.14)	2.6480	50	10000	26480.1	
ttbar_6jets Pythia noisr 500 GeV (LDC 2.84)	3.1727	25	5000	15863.45	
dus Pythia noisr 500 GeV (LDC 2.74)	2.8313	25	5000	14156.7	