

Generator Files

Ties Behnke, DESY

- some remarks by a non-expert, since none of the real experts is around

See also:

presentation by Norman earlier in the meeting on benchmarking

The real work is coordinated by Philip Bechtle, DESY

The SLAC sample

Basic assumption:

we will use the SLAC generated 4-vector file sample as a basis for the SM sample

Files have been transferred from SLAC to DESY and are catalogued on the GRID

Through the GRID they are accessible to everyone in the project

(see also remarks on GRID later in this session)

Remarks

For the moment, we have only worried about the production of the Standard Model "background" sample

Signal samples are left to the responsibility of the "analysis"

Do we need to change this strategy?

Some issues

Internal consistency etc: has been finally understood, is ok

current file has Higgs included: will be removed

Interface to TAUOLA is being worked on

Question of MC tune is under investigation

Ordering of files will be done

Final samples of generated SM background should be available soon,
will start (partial) test production soon

GRID database

<http://www-flc.desy.de/simulation/databaseinput/>

Search Database

PARAMETER	INPUT	EXAMPLE
ProcessID:	<input type="text"/>	w05323
Tag:	<input type="text"/>	Old_database, Test_SinglePar... TAGS SUMMARY
Process:	<input type="text"/>	cb, nlnh, ...
Center of Mass Energy [GeV]:	<input type="text"/>	1000, 500, ...
Cross Section[fb-1]	<input type="text"/>	Searches for cross sections not inferior to the input value
Em Polarisation [=1.0/0.0]:	<input type="text"/>	0.1,-1
Ep Polarisation [=1.0/0.0]:	<input type="text"/>	0.1,-1

Search

The search is case insensitive.

Sample Composition

Simulated Events

just a first proposal listed in the rough order of priority:

possible signals or backgrounds:	
$ee \rightarrow 4f$	50fb-1
$ee \rightarrow 2f$	20fb-1
$ee \rightarrow 6f$	> 20fb-1
$ee \rightarrow hX$	50fb-1
calibration samples:	
light quark 2f at 91.2 GeV	20 000 events
tt (6f) at 350 GeV	20 000 events
backgrounds:	
$\gamma\gamma \rightarrow X$	1fb-1
$ee \rightarrow \gamma\gamma(n * \gamma)$	10fb-1
$\nu\nu(n * \gamma)$	20fb-1
$ee \rightarrow ee$	0.1fb-1
$e\gamma \rightarrow e\gamma$	0.1fb-1
rest	1fb-1

Anticipated
sample
composition

these are
millions of events
(> 10 Mio)

major effort!



Summary

Generator samples are close to final

Most problems have been understood

Files should be available soon

Many thanks to SLAC for producing the files!