

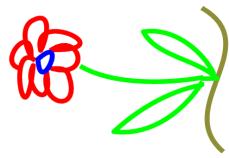
Overhaul of Simulation Webpages

Manfred Paulini
CDF Simulation Meeting
01 August 2002
Fermilab

- Same location – new outfit:

http://www-cdf.fnal.gov/cdfsim/cdfsim_main.html

Available Friday Aug 02, 02



LAST MODIFIED: Saturday, July 13, 16:33 EDT 2002

Logon Nodes

[Detector Simulation] [Offline] [CDF] [Fermilab]

USEFUL LINKS

- [TRGSim++ Home Page](#)
- [Code Browser - Event Display - AC++ - CVS / Manual - ROOT - DHCoupler - Run Summary List](#)
- [MC Production - CA++ - Farms - Software Documentation - Online Compiling - Offline Operations](#)
- [Run II Offline - Computing & Software - User Information - Programmatic Resources - Software Management](#)

MISCELLANEOUS

- [Trigger Simulation](#)
- [Simulation Validation - Regression Testing](#)

INFRASTRUCTURE

- [Random Numbers - Generator Sequencing - ParallelDB](#)
- [General Simulation Documentation - Geometry - Geant4](#)
- [Report A Problem - Simulation Development \(weekly log-files\) - Log-file Tools \(edit log-file\)](#)

SUBDETECTORS

- [Silicon - COT - TOF - Cadmium - Muon - CLC - Forward - Passive Material](#)

GENERATORS

- [Stardome MC Generation - CompHep - Alpgen](#)
- [Decay Packages: QQ - Event - Tauola](#)
- [Heavy - Pythia - Lisier - Geant - Hugen - MBR - Wgrid - Vecbos - WebGen - Grappa - Wakefield](#)
- [General Issues](#)

EXAMPLES

- [Baby Pictures \(Collection of simulation performance plots\)](#)
- [How to run simulation - production - and more ...](#)

MEETINGS

- [Meetings & Minutes - 2002 Monte Carlo Workshop](#)

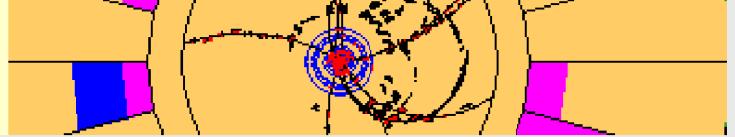
To subscribe to the mailing list of the CDF simulation group, send email with empty subject line to listserv@fnal.gov and with the body of your message being "SUBSCRIBE CDF-MC xxx", where "xxx" = Your Name, or send email to above contacts.

Contact: Manfred Paulini and Marjorie Shapiro.

Regular meetings are every off-week on Thursdays at 2 pm in the BD theater.

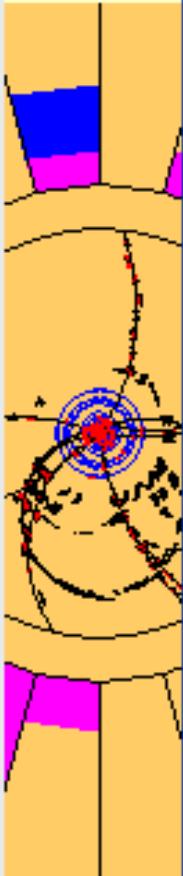
WELCOME to the webpage of the CDF Detector Simulation Group.

Webpage currently under construction



CDF Detector Simulation

CDF Detector Simulation



Webpage currently under construction

MEETINGS

Here you can find agendas and copies of transparencies as well as (sometimes) minutes of CDF simulation meetings.
(Most of the recent meetings contain links to talks.)

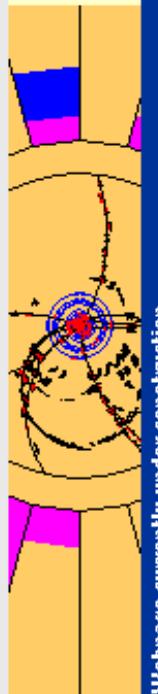
- Minutes of CDF Simulation Meeting on Jun 20 2002
- Minutes of CDF Simulation Meeting on Jun 06 2002
- Minutes of CDF Simulation Meeting on May 09 2002
- Minutes of CDF Simulation Meeting on Apr 25 2002
- Minutes of CDF Simulation Meeting on Apr 11 2002
- Minutes of CDF Simulation Meeting on Mar 28 2002
- Minutes of CDF Simulation Meeting on Mar 14 2002
- Minutes of CDF Simulation Meeting on Feb 28 2002
- Minutes of CDF Simulation Meeting on Feb 14 2002
- Minutes of CDF Simulation Meeting on Jan 31 2002
- Minutes of CDF Simulation Meeting on Jan 17 2002
- Minutes of CDF Simulation Meeting on Apr 05 2001



Last modified: Fri Jul 26 19:50:01 EDT 2002

[Detector Simulation] [Offline] [CDF] [Fermilab]
[Legal Notices](#)





Webpage currently under construction

CDF Detector Simulation

EXAMPLES: HOW TO BURN SIMULATION / PRODUCTION /

This webpage provides examples on how to generate events, run simulation/production and more. It is intended for first time users of the CDF detector simulation.

- Proper offline setup
 - How to build and use `cdfSim`?
 - How to run generators only (`cdfGen`)?
 - How to run simulation on output of `cdfGen`?
 - What about standalone MC generation?
 - How to run production on simulation output?
 - How to check the output of simulation/production?
 - How to use `runMC`?
 - Some issues with `TrackView` in MC_C
 - How to use Interactive Geant (`cdfIq`)?
 - How to use the G3X Extrapolator?
 - And some more "How to ..."

► Proper Offline Setup:

- If you don't have this in your cshrc file, execute

```
source ~/cdfsoft/cdf2_cshrc
```

- Set up your favourite offline release:

setup edfsoft2 your favourite offline release

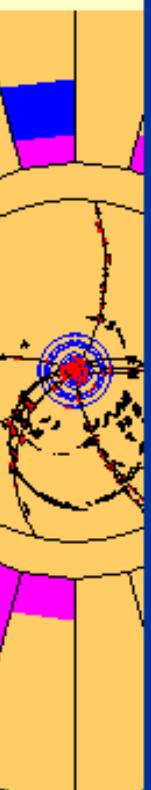
- Check [this webpage](#) to find out about available Run II Software Releases.
 - If you are going to build executables or binaries and want them to be located home directory. A possible content of this .srccfg file could be (one line):

extra dirs="tmp > cdf/scratch/SUSER/strelease/two bin > cdf/scratch/SUSER/strelease/bin lib > cdf/scra

How to build and use cdfSim?

- **cdfSim** is the AC++ executable to run the CDF detector simulation. See also [cdfSim.cc](#) (source code of AC++ module).
 - On the central platforms, cdfSim is usually already prebuilt in most offline releases. To check, execute
which cdfSim
 - If the cdfSim executable does not exist, you can build it with

```
newrel -t your_favourite_offline_release my_test_directory
cd my_test_directory
addpg_simulationModule
make simulationModule:clean
```



CDF Detector Simulation

Webpage currently under construction

MC Generators: HERWIG

■ Contact: [Jeremy Lys](#)

■ Current default: Version 6.4a starting 4.6.0int5. v6.4a in 4.7.0 as first frozen release (Version 6.202 in 4.6.2 and prior).

■ Documentation:

■ [HERWIG 6: An Event Generator for Hadron Emission Reactions With Interfering Gluons \(G. Corcella et al.\) \(hep-ph/0113631\)](#)

■ [HERWIG 6.4 Release Note \(G. Corcella et al.\) \(hep-ph/0201201\)](#)

■ Generic User Process Interface for Event Generators (Les Houches Accord)(E. Boos et al.) ([hep-ph/0109068](#))

■ Related Notes:

■ [CDF note 5969: Study of HERWIG 5.6 \(Henri Bachacou, Angela Galteri, Jeremy Lys\)](#)

■ [CDF note 5214: Comparison of underlying event energy in Herwig and CDF data \(A. Bhatti, J. Huston, E. Kovacs, V. Tano\)](#)

■ [CDF note 4261: Modified Version of HERWIG for Studying Spin Properties of the Top Quark \(Guillian, Campbell, Arneidei\)](#)

■ [CDF note 3264: Comparison of 1992-93 Inclusive Jet Cross Section with HERWIG Predictions \(Anwar Bhatti\)](#)

■ Useful Links:

■ [Herwig home page](#) – [Herwig at FNAL](#) – [Herwig at CDF](#)

■ Examples:

The following examples are intended for use with cdfGen, an executable containing only generators. Most of these example tcl files given below **CANNOT** be directly run with cdfSim. In order to run cdfSim, copy the corresponding talk-to from the generator examples below and paste it into the default file [SimulationMod/test/run_cdfSim.tcl](#). (Don't forget to also change the corresponding "mod enable" command.)

- Jeremy's very fine Herwig documentation and how to run Herwig: [herwig_v64a_cdf.txt](#) – [herwig_v6202_cdf.doc](#)
- Standard tcl file: [run_herwig.tcl](#)
- More examples in [herwig_ilexamples : herwig_test.tcl](#) ($W \rightarrow \tau\tau$ no using Tauola) – [herwig_top.tcl](#) (tt= with underlying event)
- Other examples can be found in [mcProduction/tcl](#) (Use with care!):
`mc herwigQCD.tcl - mc herwig_Wenu.tcl - mc herwig_bbar.tcl - mc herwig_tbar.tcl`
- [HerwigModule.cc](#) (source code of AC++ module)

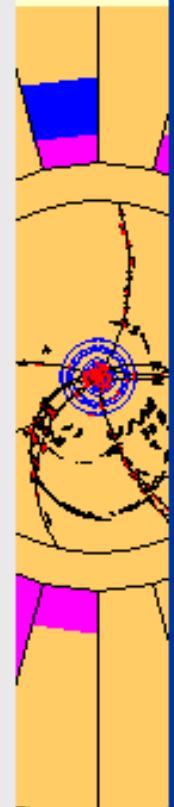


Last modified: Fri Jul 26 20:13:49 EDT 2002

[Legal Notices](#)



[Detector Simulation] [Offline] [[CDF](#)] [[CDF](#)] [Fermilab]



Webpage currently under construction

SILICON SIMULATION

Documentation:

Parametric Charge Deposition Model:

- Need note describing **performance of parametric CDM!**
- [CDF note 5871](#): Description of the Parameterized Charge Deposition Model (Michael Gold)
- [CDF note 5069](#): Parameterized Charge Deposition Model: Part II (M. Gold)
- [CDF note 4914](#): Parameterized charge deposition model for double-sided silicon (M. Gold, G. Gorfine)

Physical Charge Deposition Model:

- Need note describing **performance of physical CDM!**

CDF note 5897: Performance Evaluation of Outside-In Silicon Tracking Algorithms on Simulated Events (P. Azzi, A. Sidotti)

CDF note 5080: Charge Deposition Model in Silicon (P. Azzi et al.)

Related Notes:

- [CDF note 5991](#): "Outside-In" Silicon Tracking at CDF (K. Bloom and W.-M. Yao)
- [CDF note 5973](#): Run IIA COT Tracking Efficiency (Glennzinski, Herndon, Lin, Liu, Thom, Wilson, Wittich, Yagil)
- [CDF note 5968](#): TrackingKal - A Tracking and Alignment Software Package for the CDFII Silicon Detector (M. Feindt et al.)
- [CDF note 5931](#): COT and SVXII Tracking Performance (M. Bishai, P. Lukens, R. Madrak, T. Miao, R. Tesarek, S. Tkaczyk, W. Wester)
- [CDF note 5896](#): Studies of CDF SVXII Stereo Tracking Performance using J/Psi -> mu mu (Mary Bishai et al.)
- [CDF note 5700](#): A Procedure for the Software Alignment of the CDF Silicon System (R McNulty, T Shears, A Skiba)
- [CDF note 5260](#): Proposal for SiXQ, Run II Silicon Cluster PAD Bank (Ray Culbertson, Matt Herndon, Rick Snider)

Useful Links:

- [Charge Deposition Models](#) - [CDF Comparison with Data](#) - [Si Benchmarking Code](#)
- [Tracking Group](#) - [Silicon Studies Group](#) - [Alignment](#) - [RASNIKs](#)

Hardware Information:

- **TDR: SVXII - ISL - Tracking Performance - Trigger / XFT-SVT**
- **Home pages of: SVXII - ISL - UOO - SVT**
- **Silicon Commissioning & Operations**



Last modified: Fri Jul 26 21:12:42 EDT 2002

Legal Notices



[Detector Simulation] [Offline] [CDF] [CDE] [Fermilab]