

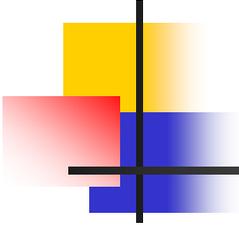
Herwig v6.510 and Jimmy

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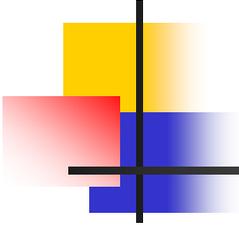
Simulation Meeting

Dec 01, 2005



Status

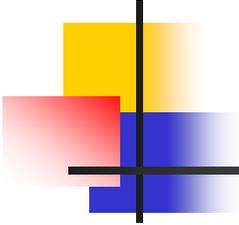
- Current version:
 - Herwig v6.505, no Jimmy.
 - PHOTOS for FSR in ttbar
- Proposed future version:
 - Herwig v6.510, with Jimmy v4.1.
 - The improvement on Jimmy v4.2 seems to be minor.
- Bug fixes on Herwig v6.510:
 - Kinematics of parton showers which can shift b-jet direction.
 - Azimuthal correlations between back-to-back jets.
- Bug with v6.510
 - An error of dividing by zero was found in the PHOTOS call.
 - Probably due to the way Herwig treats the daughters.
 - A patch is made to avoid the crash, at least on the technical level.
 - Communicating with the authors about its implication on the distributions.



Building v6.510 on cdfsoft2

- Not in the repository yet.
- Assuming cdfsoft2 6.1.2:

```
> setup cdfsoft2 6.1.2
> newrel -t 6.1.2 test612
> cd test612
> addpkg generatorMods
> addpkg herwig_i
> scp fcdflnx4:/cdf/scratch/jdlee/rel/temp_6510_jimmy/jimmy_510.tgz .
> tar -xvzf jimmy_510.tgz
> setup -f Linux+2.4-2.3.2 -q GCC3_4_3 herwig v6_510
> setenv ISAJET_DIR /home/cdfsoft/products/isajet/v7_51a/Linux
> gmake nobin
> gmake generatorMods.bin
```



Conclusion

- Herwig v6.510 with Jimmy v4.1 is available.
 - Passed simple test with 100K ttbar events.
 - A strong candidate for the next release.