Dijets in POWHEG

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- Enter the `POWHEG-BOX/jj` directory.

- Edit the Makefile to make sure you have the right path for the LHAPDF library and for the fastjet library. You can avoid using LHAPDF, and use instead the mlmpdf package, which is provided with the `BOX`. Some adjustments may be require to link fastjet in your platform. However, fastjet is not needed in order to generate events. You can replace the `pwhg_analysis.f` file with a dummy one `pwhg_analysis-dummy.f`, take away the `fastjet*wrap.o` files and the fastjet libraries from the dependencies, and the program will link. You can also avoid using the LHAPDF, and use instead the mlmpdf package that is provided by the BOX itself.

- Do make `pwhg_main`. There are several warning because of the -Wall flag in compilation. they can be ignored.

- Go to the `testrun-lhc` (or `testrun-tev`) directory. Change the `powheg.input` file at your will. Run `../pwhg_main`. It will take about 30 hours to generate 0.5M events in the `testrun-tev` case, a little more in the lhc case.

- In order to split up the work on different nodes, follow the instructions in `POWHEG-BOX/Docs/Manyseeds.pdf`.

- At the end of the `../pwhg_main` run, a file named `pwgevents.lhe` will be created. It contains the events in Les Houches format. Shower and analysis is performed by an independent program. An example on how to shower and analyze results using `PYTHIA` is given in the Makefile target `main-PYTHIA-lhef`. This is the part of the program that should be used as an example for interfacing the output to a given analysis framework. Our example (used for the paper in preparation) uses an internal histogramming package, and produces topdrawer files for analysis.