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1 Installing Herwig-7

Download and install `Herwig` by running the script https://herwig.hepforge.org/herwig-bootstrap:
`wget -c 'https://herwig.hepforge.org/herwig-bootstrap'`
`chmod +x './herwig-bootstrap'`
`'./herwig-bootstrap' './HerwigInstall'`
This will install `Herwig` to the location '`./HerwigInstall`' along with all of it's dependencies (`boost`, `fastjet`, `HepMC`, etc). Full instructions for using this script is found in https://herwig.hepforge.org/tutorials/installation/bootstrap.html

2 Generating events:

The quickest way I could find to generate events in `Herwig` was by generating parton level events in `MadGraph` and shower using `Herwig` (I also got suggestions to adopt similar method for `Pythia` as this nicely isolates matrix element generation from showering and our main aim is the study effect of different showering and hadronization techniques on our jet substructure algorithms). An example `Herwig` input file is shown in "`LHE.in`", this file configures `herwig` to shower the file "`unweighted_events.lhe`" and write out the events in the form of `HepMC` which can be read by `Delphes`.

The LHE input file "`unweighted_events.lhe`" was generate using madgraph with:
`generate p p > z h`
`output zh` In the zh/cards, edit the madspin default card to force decay h to tau and z to neutrinos as in pythia case, then set the minimum pt for heavy particles to be the desired value ($\sim$ 500 GeV) and run madgraph with madspin.