

Rivet, RivetGun, etc.

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Rivet

- C++ replacement for FORTRAN HZTool
- Combination of tools, analysis handler and analyses
- Structure based on a **Handler** which maps **Projections** on to HepMC events
- Binning, optional histogramming etc. via AIDA interface
- Core user will be JetWeb. . . but minimal dependencies for other users
- <http://hepforge.cedar.ac.uk/rivet>

RivetGun

- RivetGun isolates the generator steering (cf. HZSteer)
- Will understand HepML generator config and map params on to generators
- Generators accessed through OO wrappers: separate library called **AGILe**: “A Generator Interface Library (+ e)”

AGILe

- Currently AGILe is an OO version of the **HepMCfio** wrappers
- AGILe primarily to provide uniform gen interface for CEDAR
- AGILe *will not replace HepMCfio* even though functionality is similar — CEDAR has no resources for support
- **Would like to arrive at some rough agreement on the uniform generator interface in this meeting**
- **setParam(string, <T>)** variations, model params vs. run conditions etc.
- These should be possible. . . with varying difficulties in param passing implementation

Work plan 1

- Add param setting wrappers for FHerwig, FPythia
- Add Jimmy, Tauola, Photos etc.
- Add Sherpa, Herwig++ (Py8 later): will be needing help from Frank, David/Leif, Torbjorn
- EvtGen, Alpgen, etc. . . according to demand. HIJING? ν ?
- Event shapes: would be useful to combine existing resources into indep library
- Jet algs (KtJet, ConeJet, FastJet, HepJet' . . .): external again

Work plan 2

- HZTool from RivetGun?
- First Rivet routines scheduled: LEP event shapes, TeV (jets?)
- RivetGun, AGILe etc. in GENSER
- **rivetgun** executable with dynamic loading of AGILe sublibs
- The more the merrier: comments on code in HepForge?