MCnet GSoC ideas

Planning on first MCnet participation in GSoC. Scope & complementarity?

From CEDAR (i.e. utility / applications packages):

- Fully fledged matplotlib API for Rivet/YODA
- YODA: new binned-object class design and HDF5-based data format & tools
- Performance improvements in LHAPDF (restructuring, caching, vectorization, GPUs, ...)
- CI coverage for Rivet development (+ something else)
- Rivet routine coverage

From generators (more difficult for a “non-physics” project):

- Loop-term caching in MG5
- ML and GPU exploitation for ME evaluation in Sherpa and MG5 (vague...)