Scheduling with Go

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ng-go-gaudi demonstrator

Investigate use of `Go` as a programming language to expose and harness concurrency in `HEP`

http://bitbucket.org/binet/ng-go-gaudi

- concurrent event-loop
- sub-event concurrency
  - alg-level: extract a data dependency graph from `ATLAS` reconstruction with associated timings from a `JSON` configuration file
  - use this mock-up data to derive expected gains and performances
  - agree on a format for comparison across demonstrators ?
  - ex: rdotoesd-notrigger.json
- asynchronous I/O
- leverage `C++` libraries

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- test more dataflow setups (CMS data, others?)
- implement more dataflow use cases
  - i/o bound, cpu bound, . . .
- use C++ components from Athena/Gaudi
  - develop GoCxx on top of genreflex to automatically generate Go bindings for C/C++
  - finer-grained control of ROOT I/O from Go
- develop/expose scripts for performances and resources' usage monitoring (across platforms and setups)
  - vmem, rss, cpu

(no work since last meeting, except cleaning up GoCxx: expect a public repo soon)