

# Big Issues

# Messaging Service (1)

- Pythia, VINCIA, and Dire all have very different approaches to messaging
  - can/should we provide a consistent messaging service?
  - what do users need/want?
  - what do developers need/want?
  - what do experiments need/want?
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- current system is binary, either on or off
  - messages are passed to cout, no use of cerr
  - no levels of warning or information

# Messaging Service (2)

- proposal from Marius
- levels?
  - error (causes Pythia to fail)
  - info (useful user information)
  - develop (useful developer information)
  - debug (all hope is lost and this now needs to be used)
- customizability?
  - specify level for locality of code (e.g. parton showers, hadronization)
  - allow information hooks (users could add asserts for errors)
  - pass messages to user as `map<message, count>`

# Repository and Website (1)

- stay with GitLab?
  - stay with GitLab.com
  - migrate to gitlab.cern.ch (possible with light-weight accounts?)
  - convince hepforge to use GitLab
  - provide own GitLab server
  
- repository access
  - forked repositories (VINCIA)
  - non-collaborator access
  - public facing repository
  - <https://gitlab.com/Pythia8/releases>

# Repository and Website (2)

- website
  - webmaster?
  - where?
  - use GitLab pages?
  - <https://gitlab.com/Pythia8/docs/>
  - <https://pythia8.gitlab.io/docs/>
  
- new features
  - FAQ
  - PDFs and physics in HTML manual

# Code Analysis and Staging

- Docker images
  - <https://hub.docker.com/u/pythia8>
  - dev, releases, tutorials repositories
  - dev/test - handles almost all dependencies (970 MB)
  - dev/binder - used by “generate” for Python interface (85 MB)
- continuous integration (CI) and development (CD)
  - <https://gitlab.com/Pythia8/docs/pipelines>, <https://gitlab.com/Pythia8/papers/pipelines>
  - set up pipelines for each commit/merge?
  - check code compiles
  - check tests pass against reference
- analysis tools
  - regularly run static code analysis?
  - leave to CERN, or do locally?
  - incorporate in CI/CD?