Pythia Issues

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Status

• Current Releases

Interfaces

• Pythia

• External

Plans

Status – Current Releases

CDF   6.216

        as distributed in kits for cdfsoft
        and installed on central machines.

Fermilab   6.223

        can be installed with ups
        no change in decay tables
        tested OK

Pythia   6.226

        Changes include:
         Sugra improvements
         Increased showering size limits
         Tune A default
         (Should always check for variation
          in default parameters)

Interfaces - pythia

pythia_i package

• Wrappers to common blocks provide easy read/write access for use in any package

• Details and the decay tables in the pythia_i/doc area – complain if incomplete

PythiaMenu (generatorMods)

• Provide common access to the parameter talktos

• Not all parameters can be set by talktos such as those which "should not be modified by users"

• Access to PYGIVE is available

Interfaces - external

Currently provided by **pythia_services**

•Part of pythia_i but separate library

•Cross depencies give linking problems

•Requires separate module for each generator as well as the interfaces routines

•Needs different interface for each PS generator

•Currently interfaced

    Grappa

    Mcfm

    Wgrad

Interfaces - LesHouches

Provides standard commons for transferring event configurations from event generators to showering generators.

LesHouchesModule is provided (**Soushi Tsuno**)

•Only interface routines are needed these can either input events from ascii files or generate events directly

•still cross dependencies

Generators currently interfaced

    alpgen (ascii)   madgraph(ascii)

    comphep (ascii)   mcfm (direct)

    grappa (ascii)   wgrad (direct)

Pythia - Plans

Check new releases as they become available

- Dependent on Fermi releases

- Please report any bugs and new features

Move to using LesHouches and retire pythia_services

- Use same interface routines for Herwig

- Cannot build both together

AriadneModule now available (Ariadne 4.12)

- Being tested

- Needs documentation