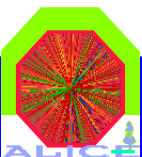# PWG2 SOFTWARE STATUS REPORT
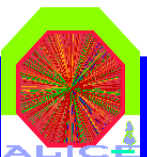
Panos Christakoglou

University of Athens – CERN

OUTLINE

- Current status of the PWG2 module.

- Suggestions and plans for further additions.

- PWG2 requirements.

- Preliminary observations from the first PDC06 tests.

- PWG2 module is divided in 6 subdirectories / topics:

  – EBYE (Software coordinator: P.C.)

  – FLOW (Software coordinator: Raimond Snellings)

  – GLOBAL (Software coordinator: Enrico Scomparin – Chiara Oppendisano)

  – HBT (Software coordinator: Mike Lisa – Jan Pluta)

  – RESONANCES (Software coordinator: Alberto Pulvirenti – Angela Badala)

 – SPECTRA (Software coordinator: Boris Hippolyte)

Small common data set stored locally is used by everybody.

Code is tested by each topic coordinator for results and coding sanity.

Code is sent to the PWG2 software coordinator who checks the code once again for results and coding conventions.

If everything ok code is committed.

Else the topic coordinator is contacted to check and change things.
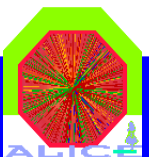
CURRENT STATUS OF THE PWG2 MODULE (2)

- During May and June we started collecting code but since July there is no great activity.

- We have committed code inside the EBYE, RESONANCES and SPECTRA.

- There is also a macro at the base directory that creates an ESD chain (to be used for validating and debugging source code locally).

- I have added the possibility to create a par file by just typing make PWG2.par inside $ALICE_ROOT.

  - It will be used for AliEn and PROOF analysis.

- Flow code is well under control by Raimond and Emanuele who will soon start committing code in the FLOW directory.

- Mike will discuss with Federico the format of the HBT code.
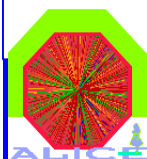
STATUS OF StHbt INTEGRATION INTO ALICE

- Beginning June 2006 Marek Chojnacki was assigned the task to integrate the HBT code into ALICE.

  - StHbtEventReader-based object to interface to ESD (or AOD?)

  - ......

- He will be in contact also with me on some technical issues concerning data access.
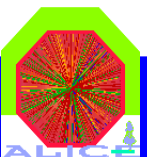
SUGGESTIONS/PLANS FOR FURTHER ADDITIONS

- We can have several additions as base classes:

    - Classes that deal with the PID.

    - Classes that return a list of pions, kaons, protons by defining several initial conditions

- Class for Event Mixing will go to the base directory:

    - Each user should create a class that derives from the previous one and modify it accordingly.

- Class for Shuffling.

- Add a new directory to store macros that will not be compiled and they will be used to generate quality check plots (Vertex, tracking, pid, ITS, TPC ...).

- Develop comparison macros for data quality checks (kinematics + esd).

- Split the PWG2 lib in two (esd + runLoader).
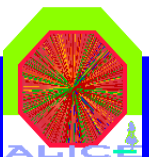
FURTHER PLANS

- Packages that are being used outside the PWG2 framework should be given to each topic coordinator asap.

- Create libraries for every physics topic so that we don't have to load the base PWG2 lib.

- Creation of an AOD base class from which all the PWG2 AOD classes that deal for example with different particle species will derive.

- Create code for AOD filtering (file and event level).

- DC06 : tasks identified, but not yet under way :-(

  - reconstruct 4-5 simple PPR plots

 - dry run of resolution correction algorithm

REQUIREMENTS (1)

- Looking at PDC'06 events requires some stuff with AliEn

  – …and documentation is not always well understood, even after having attended the AliEn tutorial.

- But still on this point I'm writing an internal note that will address the interactive and batch session issues along with some practical examples for all cases.

- We need to have the possibility to access the kinematics for the PDC06 data:

  – Further tests with AliSelectorRL are needed.

- We need to set up a PWG2 Forum under http://hypernews.cern.ch
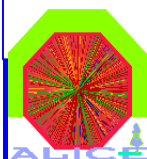
- We will use many things that the PWG0 group has been using and developing.

- AliSelector and AliSelectorRL should form two base classes from which every other selector should inherit.

  - Classes have been moved to STEER from PWG0 (linked to libESD and libSTEER).

- Analysis cuts classes should also form a base class and thus have been moved to STEER.
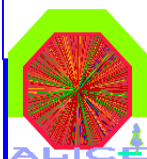
PRELIMINARY LOOK AT THE PDC06 DATA

- p+p min bias @ 14TeV:

  - /alice/cern.ch/user/a/aliprod/prod2006/output_pp/

    - I have tested RUNS: 1-16

    - Merged tag files have been produced at the RUN level for the previous RunIds.

  - /alice/cern.ch/user/a/aliprod/prod2006_2/output_pp/

    - All RUNS have been tested.

    - Merged tag files have been produced at the RUN level for all RunIds.

- p+p min bias @ 900GeV:

  - /alice/sim/2006/pp_900GeV/