

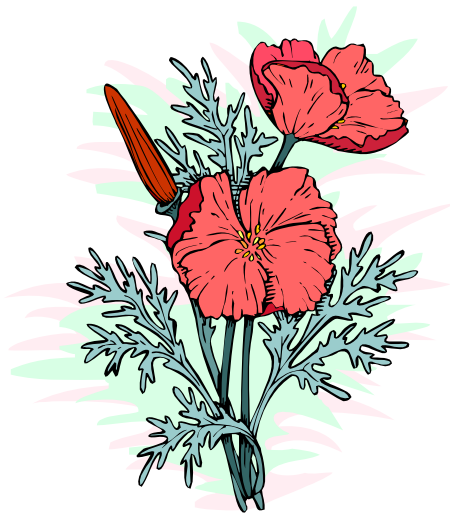


# Status of the calibration framework

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Alice Offline week

October 3<sup>rd</sup> 2005





# History



- Status at previous offline week:
  - May 17<sup>th</sup> :
    - Distribution of a draft note describing the AliRoot access classes to the condition database.
  - May 20<sup>th</sup> :
    - First implementation of the access classes to the condition database available on CVS
- Since then:
  - Plans extracted from a presentation in the previous offline week (May 31<sup>st</sup>)





# Plans (I)

- Condition Database Note:
  - New version writing is ongoing, including:
    - Modifications/clarifications (where needed)
    - Additional more general parts
    - Description of new classes/methods
  
- Implementation:
  - Comments received will be taken into account
  - See Alberto's talk

Presentation from May 31st

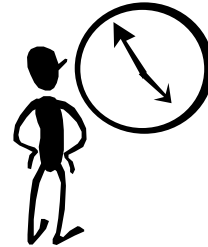




# Status (I)

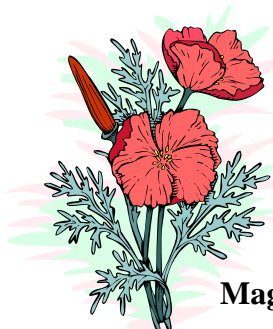
## ➤ Condition Database Note:

- New version writing is done, including:
  - Modifications/clarifications (where needed)
  - Additional more general parts
  - Description of new classes/methods
- To be distributed soon



## ➤ Implementation:

- Comments received have been taken into account
- See Alberto's talk and tutorial
  - New/improved classes
  - Performance tests
  - AliEn access classes



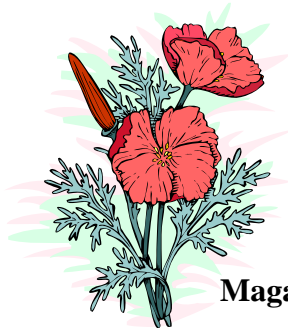


## Plans (II)



- Gathering data from "external databases":
  - Which data should be duplicated in the condition database?
  - How to access relevant data from external databases?
- Discussions are going on, first thoughts floating around...
- To be continued...

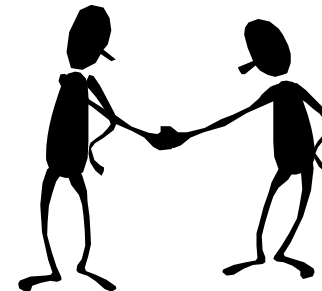
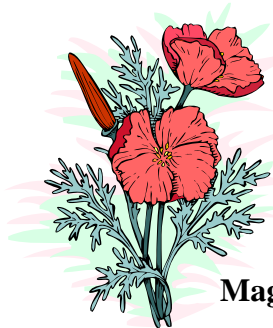
Presentation from May 31st





## Status (II)

- Gathering data from "external databases":
  - Which data should be duplicated in the condition database?
    - Still hoping to get information from detectors!!!!
  - How to access relevant data from external databases?
  - Discussions are going on, first implementations done...
  - To be continued...
- First implementations of interfaces to
  - DCS database
    - See Peter Chochula's and Boyko Yordanov's talks
  - DAQ/ECS databases
    - See Sylvain Chapeland's talk

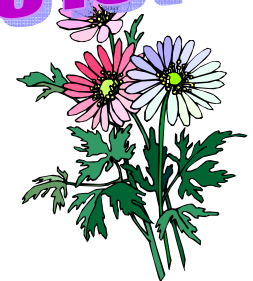
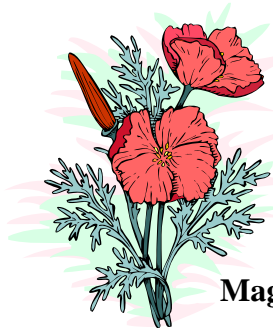




## Plans (III)

- Detector use of the CDB:
    - Very important to get feedback from users:
- Please do try and comment on the current classes
- Muon, ZDC and SPD: thank you.
  - Now: try to get other detectors to try and comment
  - DataChallenge this year:
    - We would like to check the calibration framework
    - Need detectors to participate, using the currently proposed CDB services
  - Hope to get SDD starting soon
  - Other detectors?
  - Hands-on session on Friday morning!!!

**Presentation  
from May 31st**





## Status (III)

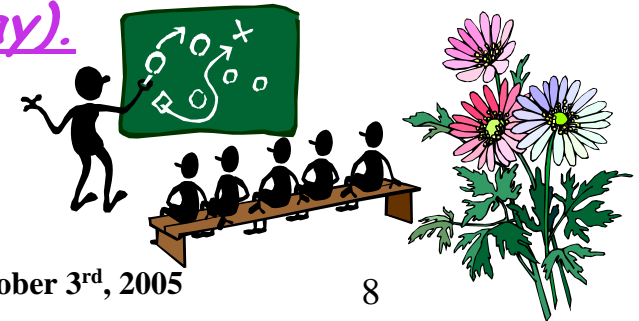
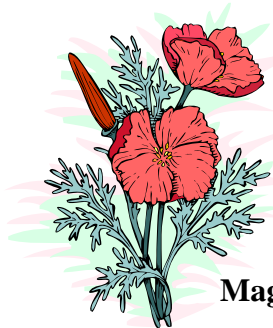
- Detector use of the CDB:
  - Very important to get feedback from users:

Please do try and comment on the current classes



- Very few detectors have tried and used the framework (see detector talks)
- MOST HAVE NOT STARTED!!!!

- Tutorials and how-to's on
  - How to use the access classes (today).
  - AliEn access (today)
  - TGeO (Wednesday)





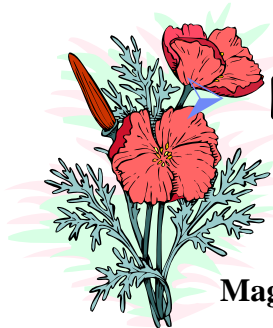


# Agenda

- Sessions on calibration:
  - Reports from offline group
    - Condition database access classes (new implementation, tutorial, AliEn access, etc...
  - Reports from detectors...
  - Session on interfaces with other databases
    - (DCS and DAQ/ECS)
  
- Sessions on alignment:
  - Reports from the offline group
    - TGEO, possible alignment strategies, etc...
  - Reports from detectors...

## Discussion and working sessions:

- Interaction offline group / detectors !





# Reports from detectors



- Reports should include:
  - Status of the calibration and alignment work
  - Ideas about, answers to and plans concerning a number of urgent issues (see mails by Federico and Magali):





# Calibration and alignment issues



- Try out the framework!
  - Fill the framework with reasonable calibration/alignment data
  - Store and retrieve the data
  
- Indicate which information you need and where it should come from:
  - How are the data going to be obtained?
  - What are the procedures which will produce the data?
  - Which information will the procedures need?





# Calibration issues



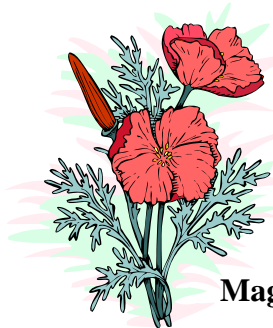
- Simulate:
  - Simulate uncalibrated data
  - Apply calibration
  - Reconstruct the data
  
- Simulate:
  - Simulate decalibrated data
  - Retrieve and calibrate the data
  - Reconstruct the data





# Alignment issues

- Indicate which parts are the “alignable” parts
- Go through the code and:
  - Make sure a change in the position of an alignable part results in a change in the position of the recorded hits
  - Make sure a change in the position of an alignable part results in a change in the position of the reconstructed space-points
- Simulate:
  - Simulate with misaligned detectors and verify that the result is indeed misaligned
  - Reconstruct with and without alignment information and verify you can indeed correct for the misalignment
  - Reconstruct the misaligned points, apply alignment algorithms and verify you can correct for the misalignment





# Conclusion



Once more, we expect a lot from the offline week...

**Please Please Please!!!**

Consider these tasks seriously!  
... and address them promptly!

Do not hesitate to ask questions, give us feedback, ask  
for help, etc...

