

ALICE AA takeup



F. Carminati

SC2

April 16, 2004



POOL

- ▶ *For ALICE most of the POOL functionality is provided by AliEn*
- ▶ *We believe that*
 - ▶ *Simple metadata is best handled by the Grid layer*
 - ▶ *ROOT collections can satisfy our needs*
 - ▶ *We do not need distributed RDBMS for condition DB*
- ▶ *So we see very little point in adopting POOL*



16-April-2004

ALICE AA TakeUp



2



SEAL

- ▶ *We are not interested in providing python as a scripting language*
 - ▶ *More than that, we are convinced that the successful take-up of C++/AliRoot by ALICE physicists is due to ROOT having C++ as a scripting language, no reason to change that*
- ▶ *We consider that the other components of SEAL are a duplication of what already exists in ROOT*
 - ▶ *We consider this duplication wasteful and dangerous*
- ▶ *We are in disagreement with the proposed plans for Mathlib, and we support Rene's proposal in its original form*
- ▶ *In particular we find that items such as "verification of the numerical stability of GSL" make no sense at all*



16-April-2004

ALICE AA TakeUp



3



PI

- ▶ *We frankly never really understood which are the requirements this project was responding to*
- ▶ *More than a comment on the project itself, this perhaps is a sign that we never felt a real need in this area*



16-April-2004

ALICE AA TakeUp



4



Simulation

- ▶ *We have participated enthusiastically to the first phase of simple benchmarks*
 - ▶ *Now we are lacking manpower to do more*
 - ▶ *We have some worries on the direction and priority of this activity now*
- ▶ *We are trying to get some help for test-beam activities*
 - ▶ *Support has been given to ATLAS test beam simulation for the moment*
 - ▶ *Discussions with Fabiola are in good way*
- ▶ *We will continue to develop the VMC interface with the intention to do full detector simulation with FLUKA*



16-April-2004

ALICE AA TakeUp



5



SPI

★ *We have our own very simple environment and we are happy with that*



16-April-2004

ALICE AA TakeUp



6



GEANT4

- ▶ *We believe validation is far from over*
- ▶ *Simple benchmarks should continue and be given appropriate priority and focus*
- ▶ *Testbeam activities are useful but not enough*
- ▶ *We would appreciate help to interface with our geometrical modeller*



16-April-2004

ALICE AA TakeUp



7



FLUKA

- ★ *We are happy with the FLUKA-CERN agreement*
- ★ *We are enjoying a very good collaboration with the FLUKA team*
- ★ *Our ambition is to use FLUKA (alongside G4?) for full detector simulation*



16-April-2004

ALICE AA TakeUp



8



ROOT

- ▶ *Just for completeness...*
- ▶ *The basis of our framework*
- ▶ *Tight and flawless relationship with the developers*
- ▶ *Hope that things will just continue this way!*

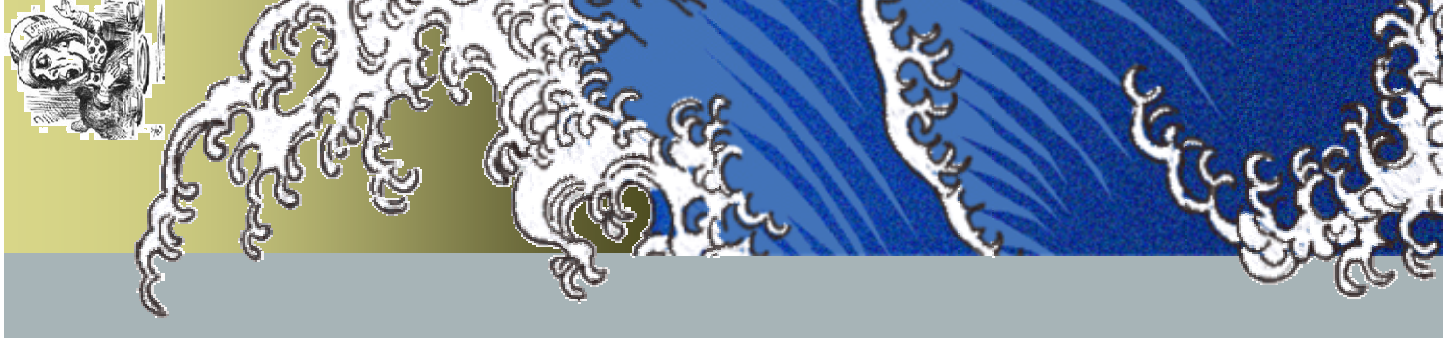


16-April-2004

ALICE AA TakeUp



9



Outlook

- ★ *AA in LCG Phase I has seen, to some extent, R&D activity in offline*
 - ★ *We would have preferred more activity on the consolidation and integration of existing products (ROOT, FLUKA, GEANT4)*
- ★ *In one year or so the manpower of the AA will be greatly reduced*
- ★ *In the next six months we should decide what will have to be continued and what terminated on the basis of the usage, if we want to have a reasonable support of the really used products with the few people who will remain*



16-April-2004

ALICE AA TakeUp

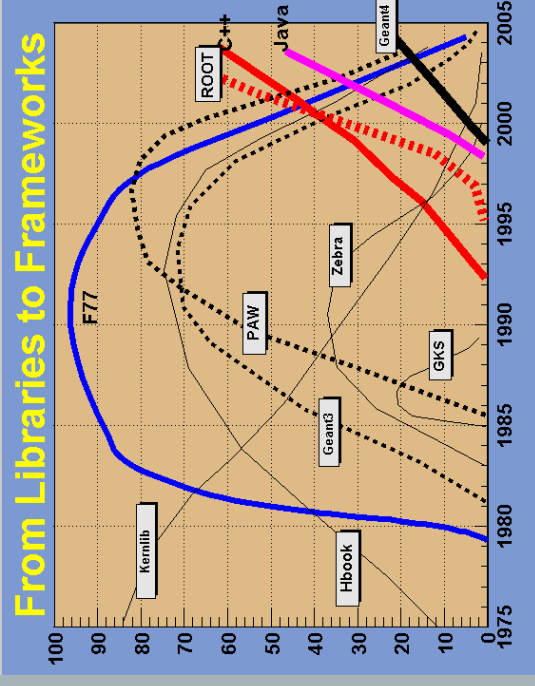


10



Conclusion

- LCG brought support for ROOT and FLUKA, a long-standing ALICE request
- We will continue to develop our offline framework
 - Providing basic technology, e.g. VMC and geometrical modeller
 - ... and we will try to collaborate with LCG wherever possible
 - Possible convergence in the simulation area, collaboration on simple benchmarks
- We have proposed to base LCG on ROOT and AliEn
 - LCG established a client-provider relationship with ROOT, which is rapidly evolving into a peer collaboration
 - Is now adopting (the design and parts of?) AliEn via ARDA/EGEE
- LCG decided to develop alternatives for some ROOT elements or interfaces to them
- We expressed our worries
 - No time to develop and deploy a new system
 - Duplication and dispersion of efforts
 - Divergence with the rest of HEP



16-April-2004



ALICE AA TakeUp

11