Report from the Scientific Computing Forum – SCF

Eckhard Elsen

Director Research and Computing



Meetings so far

- 15.2.2017
- **12.5.2017**
- -27.10.2017

Purpose of SCF

Scientific Computing is prevalent

- more and more fields of science need considerable computing and data storage resources
- Funding agencies and the tax payer are interested in cost-effective solutions
 - foster common approaches
 - efficient installations
 - typically few MW class (due to reduced manpower overhead; profit from economies of scale)

Overall Impressions on SCF

- Expressions of support from several countries and delegates for the establishment of the Forum with CERN taking the *lead*
 - requesting the possibility to follow the discussions and evolution
 - keep RRB informed
- Receive presentations from various agencies and listen to reports of individuals

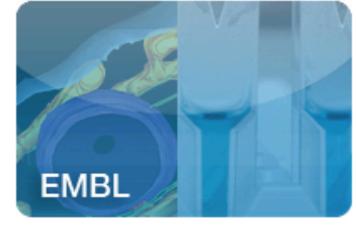
EIROForum

 EIROForum members approved the Strategy paper on 11.5.2017

- input to the EC
- idea equally applicable to other agencies

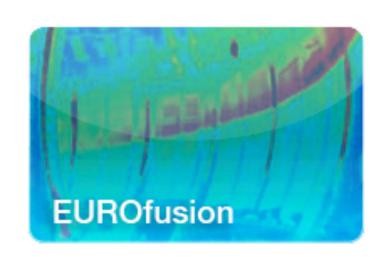


















Some strategic developments

- Square Kilometer Array (SKA) will have similar demands in data storage and computing in the mid 20ies
 - CERN and SKA concluded a collaboration agreement on exascale computing and data storage

just one example of strategic alliance



July 14, 2017

Some recent developments

- Common folklore:
 - HPC (supercomputers) require specialised code;
 HEP applications are data intensive hence; HTC (high throughput).

 But:
 - MC easily runs on HPC; even better as cross section calculations and Geant 4 are further developed
 - Modern middleware allows to port the analysis code to HPC in an efficient way

next SCF on 27.20.2012

need the software support of HPC centres;
 next SCF will focus on HPC

Community White Paper

- HEP Community has been working to produce a White Paper (CWP) which is about to be released
 - Report in next SCF
 - Describes the soft- and hardware developments required for the mid 20ies.

Adiabatic transition to the computing for HL-LHC

Summary on SCF

- SCF seems to be a useful discussion forum
 - open to everyone (as long as we can entertain a discussion) https://indico.cern.ch/category/9249/
 - tries to help shape ideas and programme
 - strategic tool for planners of computing installations
- Topical decisions are taken in WLCG
 - under scrutiny of RRB