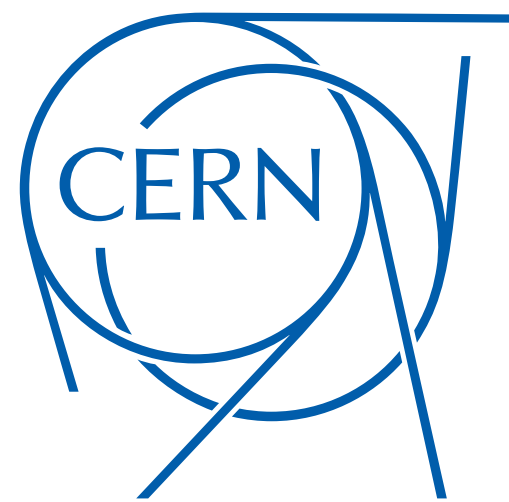# Report from the Scientific Computing Forum – SCF

Eckhard Elsen

Director Research and Computing

Meetings so far
– 15.2.2017
– 12.5.2017
– 27.10.2017
– 23.2.2018
– 20.9.2018
– 15.2.2019
– 2.10.2019 – discussed today

Agenda of 7th Scientific Computing Forum

- Role of GPUs

  - Consensus on the introduction of co-processors, which provide much better performance/cost

  - ALICE O^2, CMS, LHCb online

- CERN School of Computing

- CERN Openlab

- CERN MAlt project

Heterogenous Software

- It has become evident that the computing challenges for HL-LHC can only be met by employing heterogenous platforms: GPU, FPGA, (possibly even neuromorphic or quantum computing in the future)

- Coding languages and paradigms have to change; C++ will not be able to satisfy the needs

- HEP Community is aware and reacting (Community White Paper (CWP), Journal of Computing and Software for Big Science, Comput Softw Big Sci (2019) 3, 7)

    - Describes the soft- and hardware developments required for the mid 20ies.

- Considerable savings can be obtained with software improvements on the system side