



SÉMINAIRE DE PHYSIQUE CORPUSCULAIRE

SUJET: **The Challenges of High Energy physics computing
in the next decade**

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DATE: Mercredi 28 février 2018, 11h15

LIEU: Ecole de physique, Grand Auditoire A
24, Quai Ernest-Ansermet, Genève

RÉSUMÉ:

The experiments at the CERN Large Hadron Collider set the high end of the scale when considering the volume of resources for scientific computing in the last decade. The largest experiments collect tenths of Petabytes of RAW data every year and process more than an exabyte in the same period. The LHC physics program foresees a major upgrade in the middle of the 2020s and a High Luminosity phase after that. By that time the computing needs will have increased by up to 50 times. In the meanwhile, large other players in scientific computing are preparing to collect data: the Square Kilometre Array for example is expected to manage as much data as the LHC at the same time of its high luminosity phase. The HEP funding agencies are asking to keep the cost of computing under control and we cannot foresee an increase in hardware resources beyond what technology can provide. In this contribution I will explain the challenges of HEP computing in the next decade and indicate the areas of work where the HEP community foresees an evolution to cope with the future challenges.

INFORMATION : <http://dpnc.unige.ch/seminaire/annonce.html>

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