Towards the 2nd Generation Accelerator Transient Data Analysis Framework

Friday, 25 September 2015 10:00 (10 minutes)

During the last two years, CERNs Large Hadron Collider (LHC) and most of its equipment systems were upgraded to collide particles at an energy level twice higher compared to previous operational limits. System upgrades and the increased machine energy pose new challenges for the analysis of transient data recordings, which have to be both dependable and fast. With the LHC having operated for many years already, statistical and trend analysis across the collected data sets is a growing requirement, highlighting several constraints and limitations imposed by the current software and data storage ecosystem. Based on several analysis use-cases, this paper highlights the most important aspects and ideas towards an improved, 2nd generation data analysis framework to serve a large variety of equipment experts and operation crews in their daily work.

Presenter: BOYCHENKO, Serhiy (Universidade de Coimbra (PT))

Session Classification: Presentations by students