Contribution ID: **235**   Type: **Sectional**

Accelerating personal computations with HTCondor: generating large numbers of events with GENIE

Tuesday, 1 October 2019 17:15 (15 minutes)

GENIE is one of the most popular MC neutrino event generators, widely used in essentially all neutrino accelerator experiments (e.g. NOvA, MINERVA). The tasks related to the development and optimization of the generator itself require creating a large number of events in the shortest possible time, to reduce the overall development time. The usage of large-scale distributed computing infrastructures, such as Grid, does not guarantee minimal execution time due to the possibly long queue times. At the same time the power of a modern PC is not capable of making such computations in a reasonable amount time. In this work we give an example of a hybrid approach: accelerating computations by using a personal computing device in conjunction with a general-purpose batch-system based on HTCondor.

Primary author: Mr BALASHOV, Nikita (JINR)

Co-authors: Mr KAKORIN, Igor (Joint Institute for Nuclear Research); KONSTANTIN, Kuzmin (-); NAUMOV, Vadim (-)

Presenter: Mr BALASHOV, Nikita (JINR)

Session Classification: Distributed Computing. GRID & Cloud computing

Track Classification: Distributed Computing. GRID & Cloud Computing