Contribution ID: **180**   Type: **Sectional reports**

Analytical platform for socio-economic studies

Friday, 9 July 2021 11:45 (15 minutes)

Started in natural sciences, the high demand for analyzing a vast amount of complex data reached such research areas as economics and social sciences. Big Data methods and technologies provide new efficient tools for researches. In this paper, we discuss the main principles and architecture of the digital analytical platform aimed to support socio-economic applications. Integrating specific open-source solutions, the platform intended to cover full-cycle data analysis and machine learning experiments, from data gathering to visualization. One of the system's primary goals is to deliver the advantage of the cloud and distributed computing and GPU accelerators with Big Data analysis techniques. The authors present the approach of building the platform from low-level services such as storage, virtual infrastructure, pass-through authentication, up to data flows processing, analysis experiments, and results representation.

Summary

Primary authors: BELOV, Sergey (Joint Institute for Nuclear Research); ILINA, Anna (Joint Institute for Nuclear Research); JAVADZADE, Javad (JINR); KADOCHNIKOV, Ivan (JINR); KORENKOV, Vladimir (JINR); PELEVANYUK, Igor (Joint Institute for Nuclear Research); SEMENOV, Roman (JINR); ZRELOV, Petr (LIT JINR)

Presenter: BELOV, Sergey (Joint Institute for Nuclear Research)

Session Classification: Big data Analytics and Machine learning.

Track Classification: 9. Big data Analytics and Machine learning