



Contribution ID: 228

Type: Oral

## Heterogeneous cluster HybriLIT: New possibilities for the development of parallel applications

*Thursday, 17 March 2016 13:10 (10 minutes)*

In order to increase the efficiency of work on the heterogeneous cluster HybriLIT, there appears a need to develop an information-computing environment for work with parallel programming technologies used in the development of high performance applications and for carrying out computations by means of resources of the heterogeneous cluster.

In order to provide new possibilities for a more efficient work on the cluster, the following software has been installed on the cluster:

- SLURM (Simple Linux Utility for Resource Management);
- CernVM-FS (CERN virtual machine file system);
- EOS (file system);
- NFS (network file system);
- MODULES.

With an increasing number of users of the cluster, in order to provide new possibilities for efficient work management and mutual development of projects, new services such as GitLab [1] and FreeIPA [2] have been introduced. Other services provided for users include:

- HybriLIT website [3];
- HybriLIT User Support project in Project Management Service [4];
- Indico service [5].

References:

1. GitLab service: [gitlab-hybrilit.jinr.ru](http://gitlab-hybrilit.jinr.ru)
2. FreeIPA: [dobby.jinr.ru](http://dobby.jinr.ru)
3. HybriLIT portal: [hybrilit.jinr.ru](http://hybrilit.jinr.ru)
4. Project Management Service: [pm.jinr.ru](http://pm.jinr.ru)
5. Indico service: [indico-hybrilit.jinr.ru](http://indico-hybrilit.jinr.ru)

**Primary author:** TOROSYAN, Shushanik (LIT JINR)

**Co-authors:** DMITRY, Belyakov (LIT JINR); VALOVA, Lucia (Institute of experimental physics of SAS Kosice, Slovakia); VALA, Martin (Institute of experimental physics of SAS Kosice, Slovakia); MATVEEV, Mikhail (LIT JINR); ZAIKINA, Tatiana (LIT JINR)

**Presenter:** TOROSYAN, Shushanik (LIT JINR)

**Session Classification:** AYSS 2016 competition

**Track Classification:** Information Technology