
Contribution ID: **114** Type: **Poster**

# Virtual Laboratory Powered by GridSpace in PL-Grid

## Please indicate your preferred day to give a demo.

Tue-Wed

## 3

We will show the demo on PL-Grid booth.

## Project(s) or EGEE activity presenting the demo or poster (project or activity names only)

PL-Grid

## Special requirements other than the set up mentioned in the CfA text.

none

## Abstract

We present the details of GridSpace platform which serves
as a basis for the virtual laboratory developed in PL-Grid project.
In GridSpace, the high-level notation for composition of complex
applications is based on the Ruby scripting language.
To provide an easy access to different computing and data resources,
we have introduced a grid object abstraction level hierarchy.
The Virtual Laboratory is equipped with tools for user-friendly
experiment creation and execution, enabling reusing of existing
experiments, gathering and exploiting provenance, as
well as integration of geographically-distributed compute and data
resources.

Virtual Laboratory has been applied to:
- execute important virological experiments in ViroLab,
- protein folding and structure comparison,
- data mining with the Weka library,
- computational chemistry - to develop and run series of
Gaussion application on EGEE.
- as an education tool in computer science classes.

http://virolab.cyfronet.pl
http://gs.cyfronet.p

**Primary author:** Dr MALAWSKI, Maciej (AGH University of Science and Technology, Krakow, Poland)

**Co-authors:** HARĘŻLAK, Daniel (ACC Cyfronet AGH, Krakow, Poland); CIEPIELA, Eryk (ACC Cyfronet AGH, Krakow, Poland); KOCOT, Joanna (ACC Cyfronet AGH, Krakow, Poland); KASZTELNIK, Marek (ACC Cyfronet AGH, Krakow, Poland); Dr BUBAK, Marian (AGH University of Science and Technology, Krakow, Poland); NOWAKOWSKI, Piotr (ACC Cyfronet AGH, Krakow, Poland); BARTYŃSKI, Tomasz (ACC Cyfronet AGH, Krakow, Poland); Mr GUBAŁA, Tomasz (ACC Cyfronet AGH, Krakow, Poland)

**Presenter:** Dr MALAWSKI, Maciej (AGH University of Science and Technology, Krakow, Poland)