Contribution ID: **1035**                                                                                          Type: **Poster**

# Strategies of a WLCG Tier-2 site to meet the challenge of ever growing demands on delivery of computing resources

*Friday, 8 July 2022 20:10 (20 minutes)*

The current era of Exascale computing brings ever growing demands on the amount of available computing performance, storage capacity and network throughput. This also affects the massive computing infrastructure for management of data produced by the experiments at the LHC, the Worldwide LHC Computing Grid (WLCG). The standard financing used for many years enabling the resource growth of 10 - 20% is no longer sufficient and to close the resource gap different methods are pursued. The sites involved in the WLCG are encouraged to find non-grid external resources to be used for WLCG
tasks. Probably the most important among them are High Performance Computing (HPC) Centers.

In this contribution, we present an overview of one of the WLCG sites, the distributed Tier-2 center in Prague, the Czech Republic. It is a standard example of a WLCG medium size Tier-2 center concerning the hardware resources, site management and the network connections within the WLCG, so a general picture of a WLCG Tier-2 site is provided. In addition, our site complies with the current trends supported by the WLCG. First it is the use
of resources of the external national HPC center in Ostrava and second providing resources not only for the LHC experiments but also other particle and astro-particle experiments. This way we follow the recently adopted strategy towards a sustainable and shared infrastructure adapted to the needs of large Exascale science projects. In addition, we make use of BOINC which enables additional external contributions to our resources.

## In-person participation

Yes

**Primary author:**   CHUDOBA, Jiří (FZU – Institute of Physics of the Czech Academy of Sciences)

**Co-authors:**   Dr ADAMOVÁ, Dagmar (Nuclear Physics Institute of the Czech Academy of Sciences);  MIKULA, Alexandr (FZU – Institute of Physics of the Czech Academy of Sciences);  Dr SVATOŠ, Michal (FZU – Institute of Physics of the Czech Academy of Sciences);  UHLÍŘOVÁ, Jana (FZU – Institute of Physics of the Czech Academy of Sciences);  VOKÁČ, Petr (FZU – Institute of Physics of the Czech Academy of Sciences);  MÍČA, Lukáš (FZU – Institute of Physics of the Czech Academy of Sciences)

**Presenter:**   CHUDOBA, Jiří (FZU – Institute of Physics of the Czech Academy of Sciences)

**Session Classification:**   Poster Session

**Track Classification:**   Computing and Data handling