

# PUNCHLunch –

the online lunch seminar of the PUNCH4NFDI Consortium

Every second Thursday, 12:30-13:30 hrs: keynote and discussion



Thursday, 16 September 2021, 12:30 hrs:

**Manuel Giffels (KIT), Kilian Schwarz (GSI)**

## “Dynamic federation of heterogeneous resources in high-energy physics and beyond”

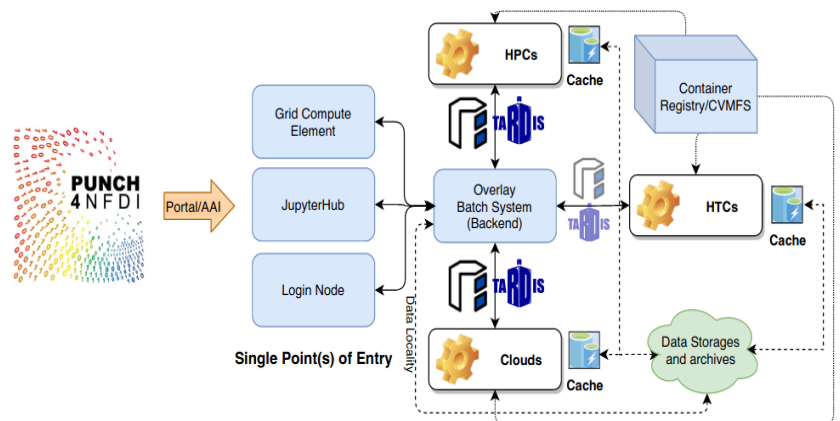
### Abstract:

Effective operation and utilisation of globally distributed homogeneous compute resources have become a standard in high-energy physics. The expected resource scarcity for future experiments and the growing desire to dynamically integrate temporarily available and more heterogeneous resources require extending compute beyond classical Grid resources and to integrate high-performance compute centres and clouds.

This PUNCHLunch presents the software framework COBaID/TARDIS that dynamically allocates and transparently integrates such heterogeneous resources into a federated infrastructure, while

providing unified access and ensuring an efficient utilisation. These opportunistic compute resources can e.g. access huge storage resources through dynamic XRootD-based data caches. These have been developed and tested in an ErUM-Data pilot project and will provide access to a planned virtual data centre concentrating data storage inside a few large data centres interconnected by high-speed network links.

The seminar concludes with an outlook on how the presented technologies can be easily applied to further scientific realms in the scope of NFDI and how they contribute to the base layer of the Compute4PUNCH project.



### Connection details:

**ZOOM Meeting “PUNCHLunch seminar”:** <https://desy.zoom.us/j/91916654877>

**Webinar ID:** 919 1665 4877, **passcode:** 481572

### Next event:

Thursday, 30 September 2021, 12:30 hrs: The DAPHNE4NFDI consortium (tbc).

### Connect to PUNCH4NFDI:

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