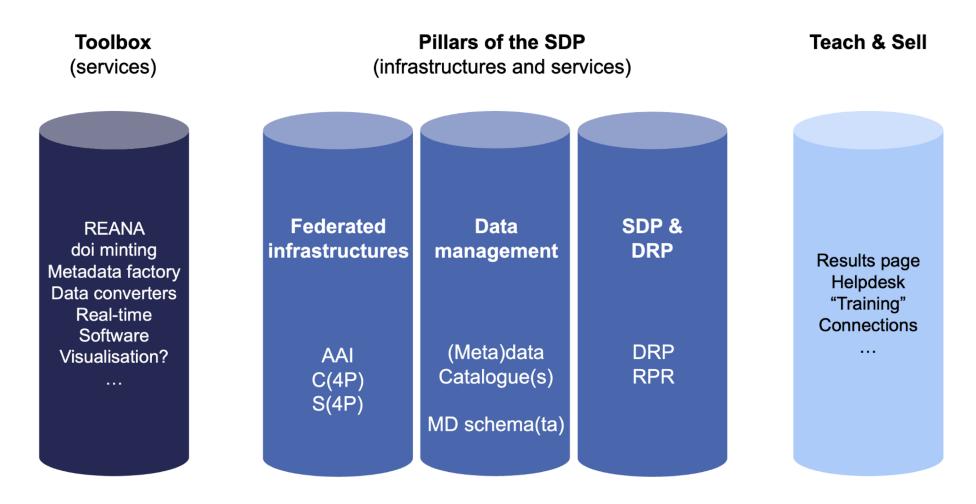
Plans for PUNCH 2.0-Perspective TA5 / FIAS

TA5 WP Meeting 06/02/2025

A. Redelbach

Strategy for PUNCH 2.0 at annual meeting



- → Structure with 3 main pillars
- → Plans to be defined/documented/discussed

Structuring of ideas related to TA5 for PUNCH 2.0

New technologies for real-time processing (FPGA platform, integration of ML, distributed systems) **PUNCH infrastructure**(Containerization in C4P, interactive Jupyter, ML-PPA)

Sustainable solutions for real-time processing

Online-offline validator (workflows, metadata, archives, simulation, data converters)

Use cases

(online data, tutorials, benchmarks/scaling, resource-efficiency)

FIAS plans

Federated Infrastructures:

FIAS will investigate **sustainability of workflows on C4P/S4P** and integrate a service to evaluate corresponding energy consumption/carbon footprint

Training, Communication, Outreach Tasks:

FIAS wants to offer **teaching material/tutorials** for high performance computing, resource-efficiency (also relevant for NFDI)

SDP and DRP:

FIAS is interested in CBM and ALICE related workflows and their coupling to DRPs and REANA.

TA5/extra topics:

Online-offline validator (workflows, metadata, archives, simulation, data converters)

Evaluation of triggering/filtering steps (statistics analysis)

Coupling to metadata

Toolbox

Data Management