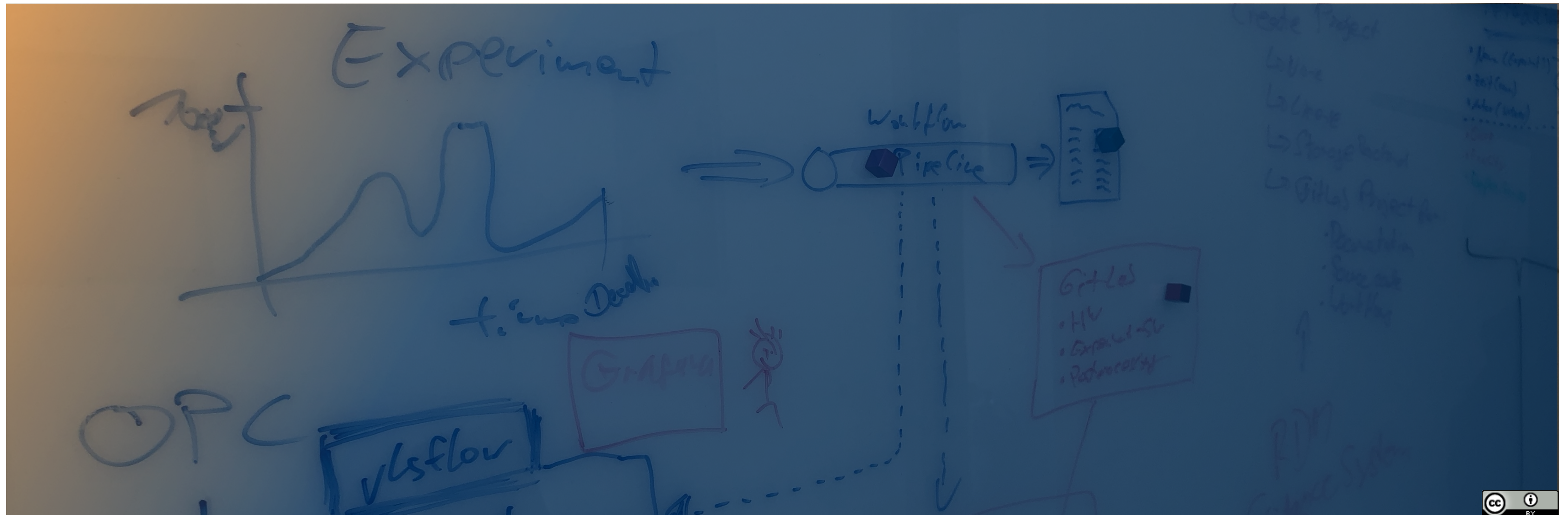


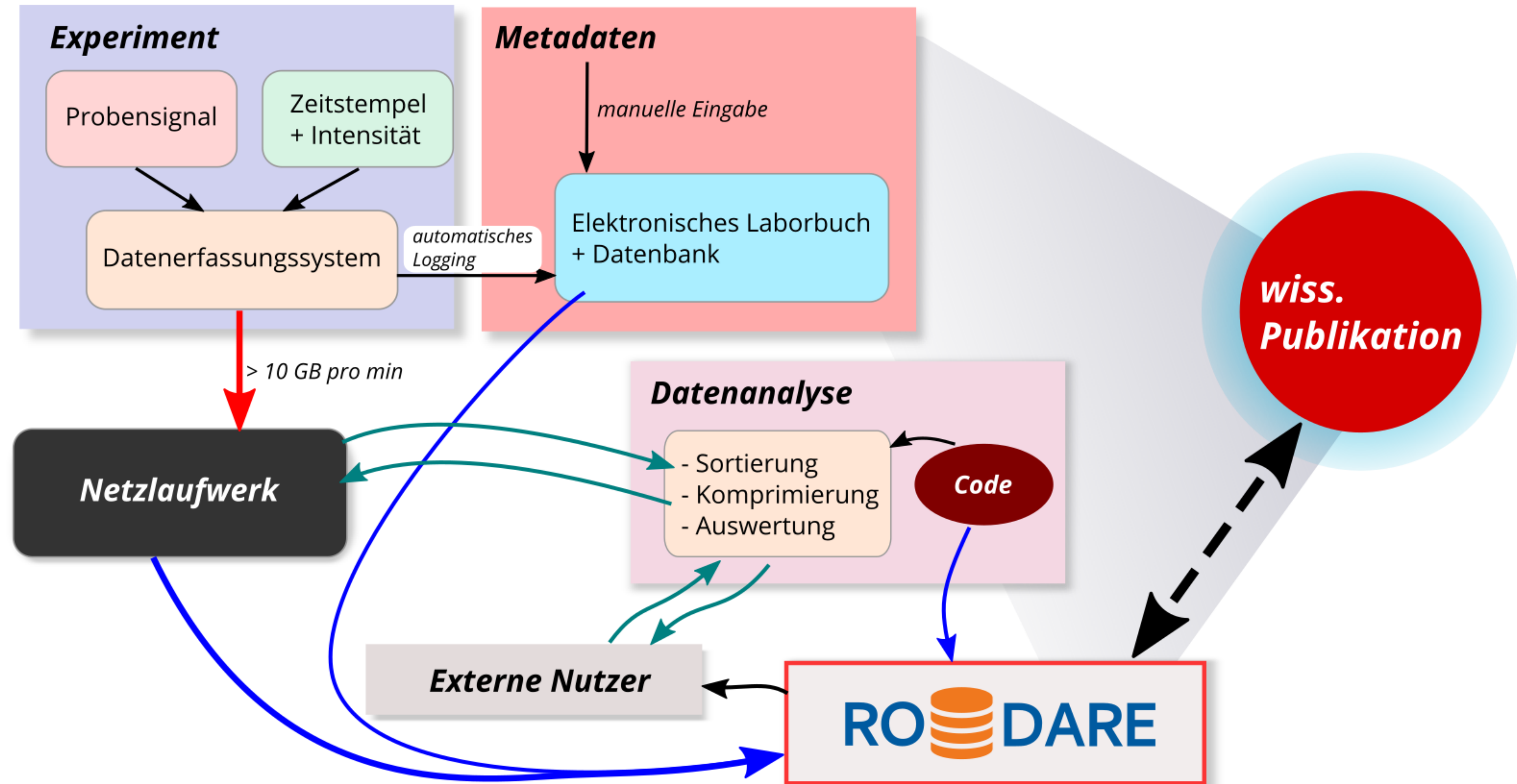


MT-DMA ST1 Preparation Workshop

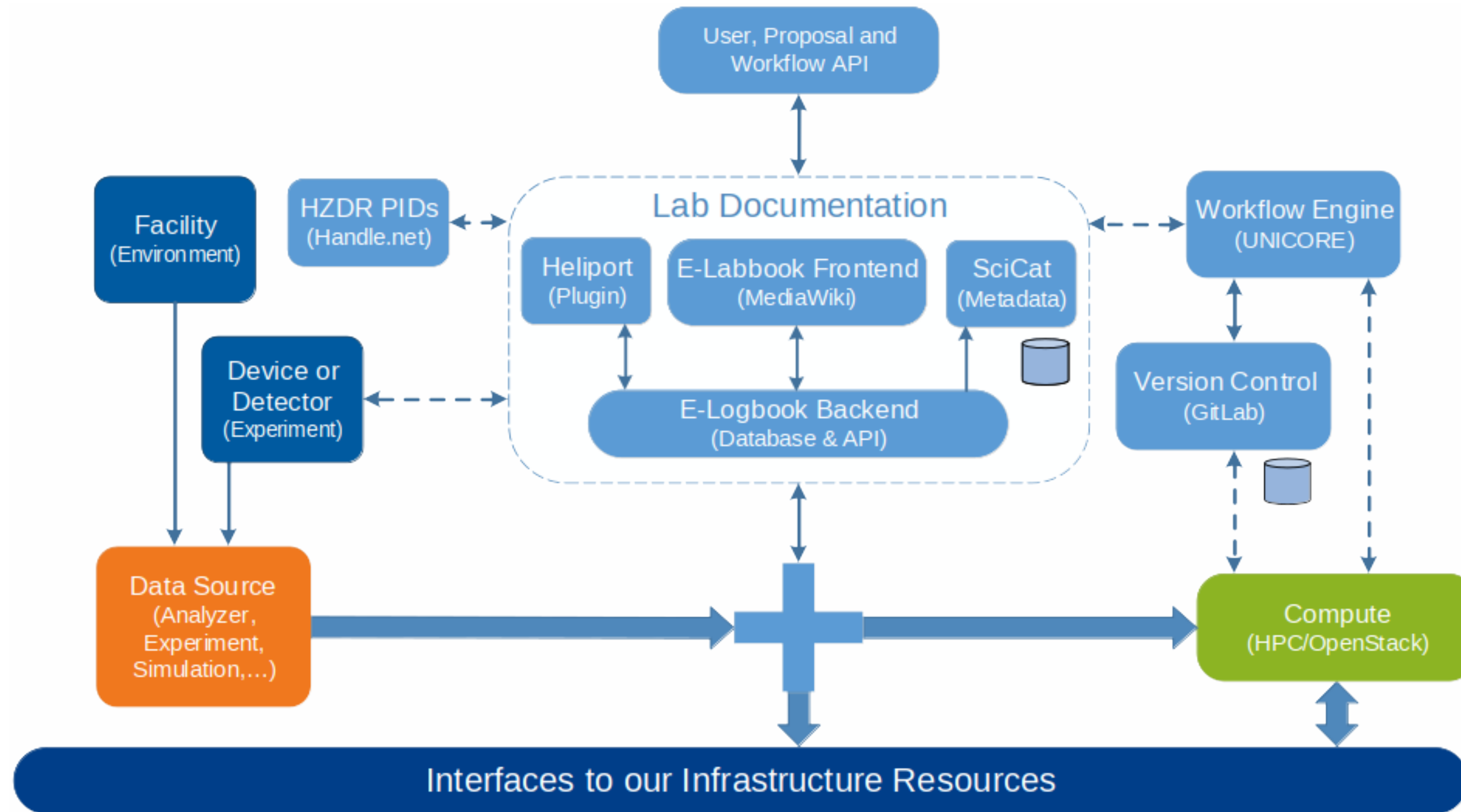
14rd of June, 2023



HZDR THz science (TELBE)



HZDR THz science (TELBE)



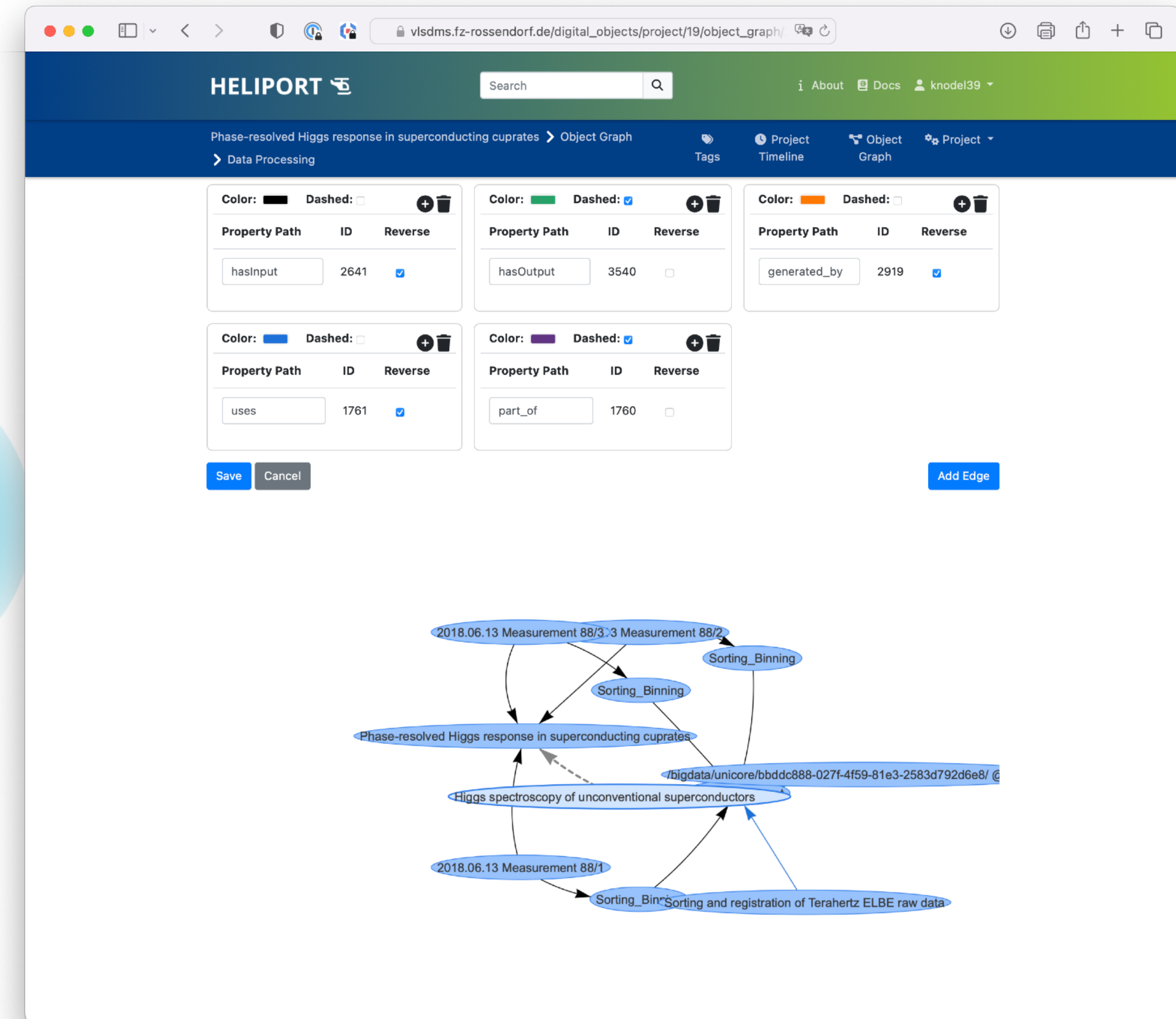
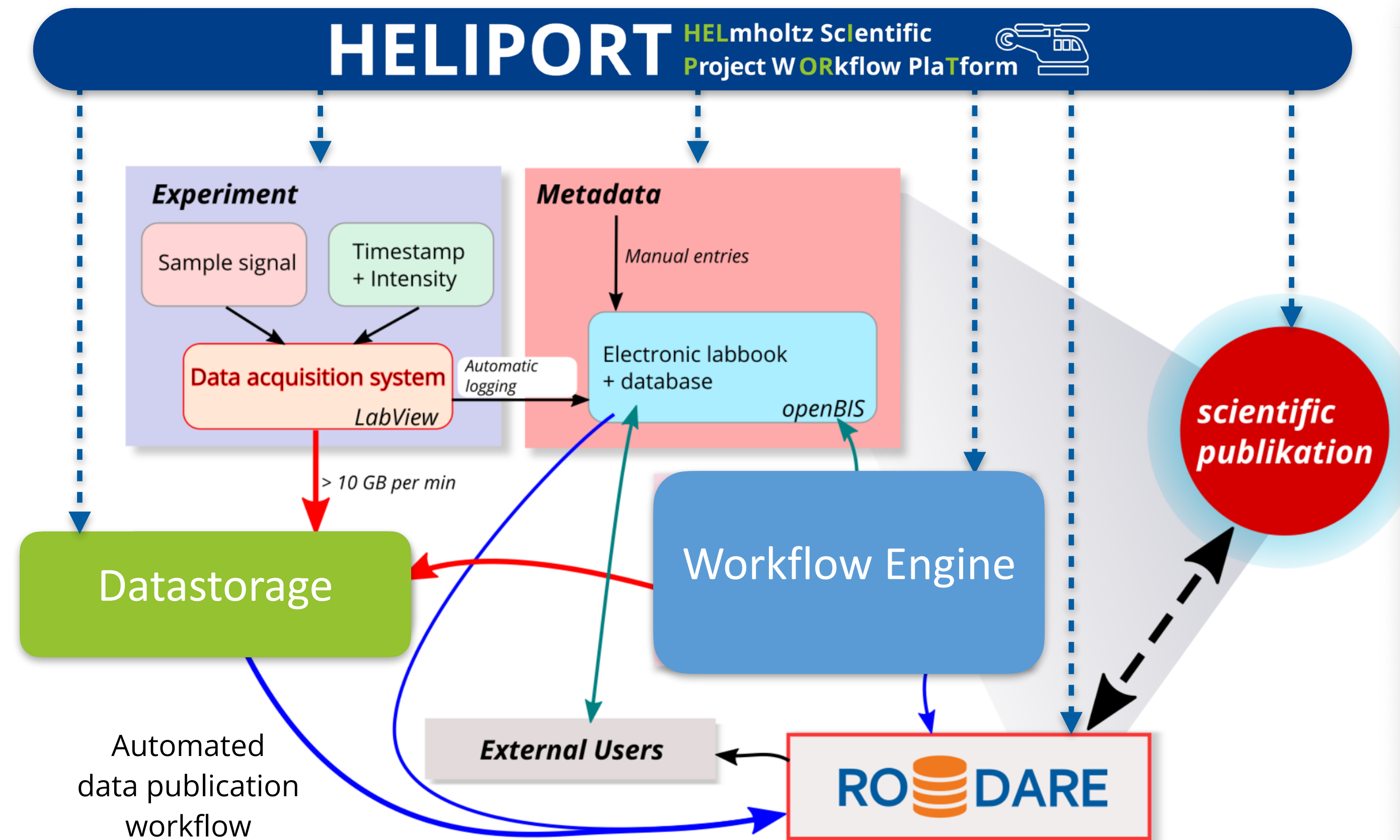
HZDR THz science (TELBE)

Step	Tools	Competences
Proposal Management	<u>GATE</u> with <u>UmbrellaID</u>	Central IT, User Office
Datataking / detector	Lab control software Labview	Mainly beamline scientists, local experts, partly Forschungstechnik
Start-To-End-Simulation	-	-
Online processing and online data reduction	Grafana (slow control data from user side) OPC-UA (slow control data from ELBE facility) Driven by algorithms and software from the user community.	Science community, experiment experts Infrastructure: Central IT

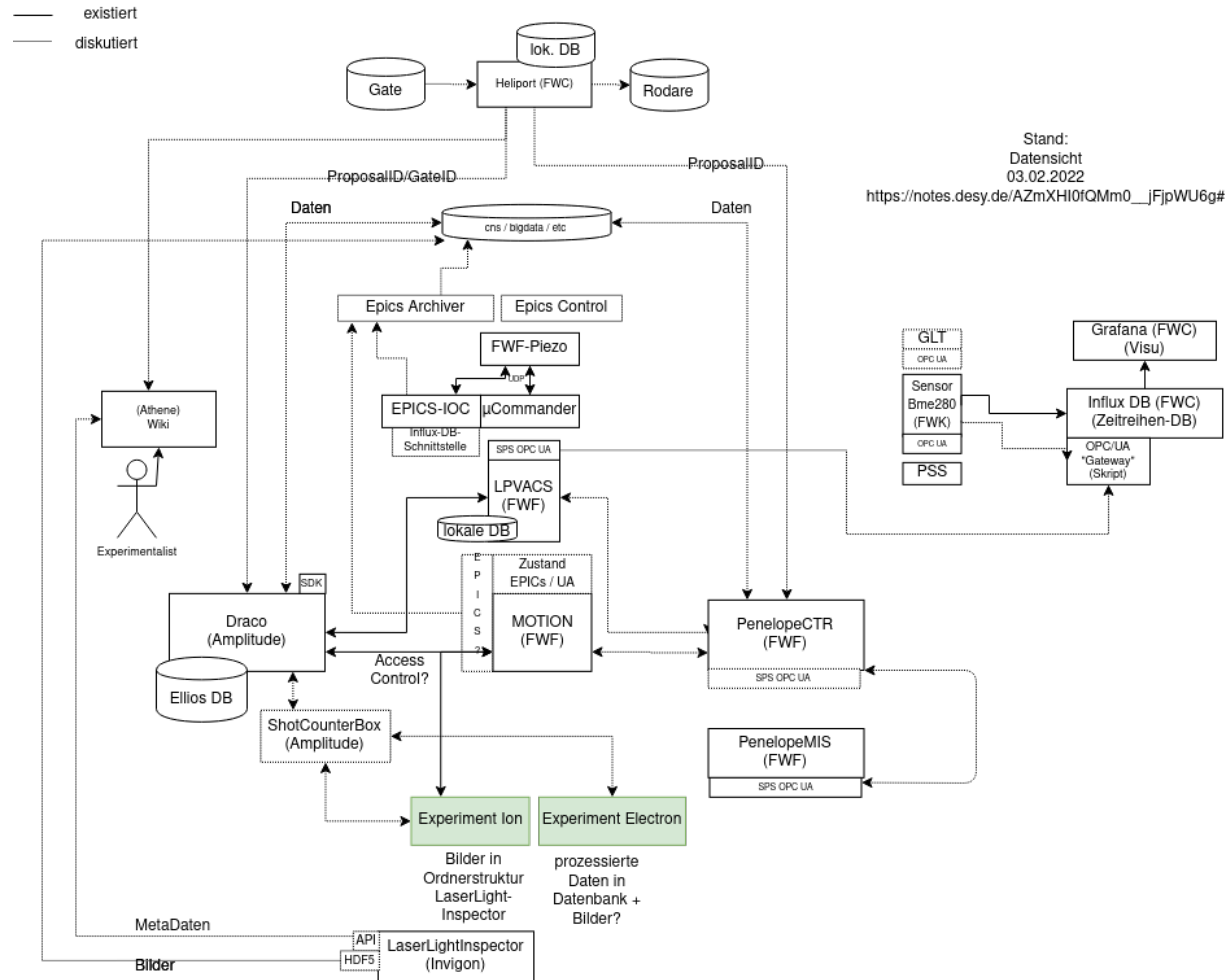
HZDR THz science (TELBE)

Step	Tools	Competences
Data storage	GPFS Federated data infrastructure required for the future.	Central IT
Offline data analysis	Infrastructure: HPC (SLURM, UNICORE , Jupyter) Community specific analysis software	Science community, experiment experts Infrastructure: Central IT
FAIR data handling, publication and archiving	Rodare (Zenodo clone), HELIPORT (project metadata), Scicat , Helmholtz Codebase (gitlab), local Archive	Central IT
Step-overarching: Metadata handling & ELN	Labbook (Mediawiki), Scicat , Automated reporting from Laview via Python script into Labbook, HELIPORT for project-level metadata	Central IT
Step-overarching: Used data formats, Data flow & automatisisation	UNICORE , HELIPORT	Standard data formats: Driven by user community and user groups Infrastructure and data flow: Central IT

HZDR THz science (TELBE) — HELIPORT



HZDR photon science



HZDR photon science

Step	Tools	Competences
Proposal Management	<u>GATE</u> with <u>UmbrellaID</u>	Central IT, User Office
Datataking / detector	Lab control software for cameras, EPICS	Mainly beamline scientists, local experts, partly Forschungstechnik
Start-To-End-Simulation	PIConGPU (Computergestützte Strahlenphysik am HZDR)	Content: Science community Infrastructure: Central IT
Online processing and online data reduction	• Grafana (slow control data from user side), OPC-UA (slow control data from ELBE facility). • Driven by algorithms and software from the user community. • Data reduction and online processing planned for the future.	Science community, experiment experts Infrastructure: Central IT

HZDR photon science

Step	Tools	Competences
Data storage	GPFS Federated data infrastructure required for the future.	Central IT
Offline data analysis	Infrastructure: HPC (SLURM, Jupyter) Community specific analysis software HIFIS Jupyter service	Science community, experiment experts Infrastructure: Central IT
FAIR data handling, publication and archiving	Rodare (Zenodo clone), HELIPORT (project metadata), Scicat , Helmholtz Codebase (gitlab), local Archive	Central IT
Step-overarching: Metadata handling & ELN	Labbook (Mediawiki), Scicat , Automated reporting into SciCat	Central IT
Step-overarching: Used data formats, Data flow & automatisisation	CWL, HDF5	Standard data formats: Driven by user community and user groups Infrastructure and data flow: central IT