



Beitrag ID: 97 Beitragskennung: W07

Typ: **Workshop (Short)**

## Making Helmholtz Data Assets Visible via the Helmholtz Knowledge Graph

This workshop aims to advance the Helmholtz Knowledge Graph (HKG) as a shared metadata backbone by identifying new data providers and sources, extending and refining the HKG data model, and jointly evaluating practical onboarding processes for data providers across Helmholtz.

The Helmholtz Knowledge Graph is a federated metadata infrastructure that makes digital assets—such as datasets, publications, software, and instruments—discoverable, comparable, and queryable across the Helmholtz Association. While the HKG already integrates metadata from multiple infrastructures, its continued value depends on active collaboration with data providers, domain experts, and metadata professionals.

The workshop provides a structured, interactive setting to work on three closely connected themes. First, participants will identify novel data providers and metadata sources, including domain-specific repositories, institutional services, and emerging infrastructures, that could meaningfully extend the coverage of the HKG. This includes discussing when data sources can be considered authoritative and how they may be used to validate, enrich, or contextualize other metadata in the graph.

Second, the workshop will explore metadata schemas and domain-specific structures that are currently not, or only partially, represented. Participants will review limitations of the existing HKG data model and discuss extensions that improve expressiveness for search, discovery, and cross-domain analysis.

Finally, participants will discuss how a structured onboarding process for data providers can be established, identifying challenges, best practices, and opportunities to better align technical pipelines with real-world metadata creation and maintenance.

Outcomes include a curated list of candidate data providers, shared criteria for authoritative metadata, concrete proposals for extending the HKG data model, and initial milestones for onboarding new data providers.

The workshop will be organized into parallel and successive discussion tables, followed by joint synthesis sessions to consolidate results across perspectives.

Data stewards, infrastructure providers, metadata specialists, and developers working with metadata infrastructures within Helmholtz and beyond.

### **ONLY WORKSHOPS - Proposed interaction format**

Discussion

### **Alternative Track**

### **ONLY WORKSHOPS - Tentative audience**

Data stewards, infrastructure providers, metadata specialists, and developers working with metadata infrastructures within Helmholtz and beyond.

### **ONLY WORKSHOPS - Maximum number of participants**

## **ONLY WORKSHOPS - Special technical requirements**

Projector, whiteboards or flip charts, separate group tables

**Autor:** HOFMANN, Volker (Forschungszentrum Jülich)

**Co-Autoren:** DESHPANDE, Anand (DKFZ); DMELLO, Fiona (Forschungszentrum Jülich GmbH); PREUSS, Gabriel (Helmholtz-Zentrum Berlin für Materialien und Energie); KULLA, Lucas (DKFZ); LAMPARTER, Lucas; NOLDEN, Marco (Deutsches Krebsforschungszentrum Heidelberg (DKFZ)); SOYLU, Mustafa (Forschungszentrum Jülich); BRENDIKE-MANNIX, Oonagh (HMC/HZB); FATHALLA, Said; Prof. SANDFELD, Stefan (Forschungszentrum Jülich GmbH)

**Vortragende(r):** HOFMANN, Volker (Forschungszentrum Jülich)

**Sitzung Einordnung:** WORKSHOPS

**Track Klassifizierung:** HMC Conference 2026 - Pre-Conference Workshop: Pre-Conference Workshops