



Beitrag ID: 14 Beitragskennung: W08

Typ: **Workshop (Short)**

## **Semantics Hidden in the Dark – Make Datasets Shine (Practical Integration of Terminology Services for FAIR Data)**

Semantic technologies and terminology services are a cornerstone for implementing the FAIR principles, as they make the meaning of data explicit, machine-actionable, and reusable beyond their original context. While data may be technically accessible, a lack of shared semantics often limits interoperability and hinders reuse across disciplines, infrastructures, and research communities. Terminology services address this challenge by providing controlled concepts, semantic relationships, and persistent identifiers that enable consistent interpretation and integration of data.

This workshop focuses on the practical adoption of terminology services in research data infrastructures, moving beyond conceptual discussions toward concrete, transferable implementations. It presents key results of the BITS project (Blueprint for the Integration of Terminology Services in Earth System Science) and demonstrates how terminology services on the example of the ESS TS (<https://terminology.nfdi4earth.de>) can be embedded into research data infrastructures to improve discovery, interoperability, and semantic enrichment of datasets. Designed as an interactive forum, the workshop combines short inputs, live demonstrations, and participatory elements to make the added value of semantics tangible for different stakeholder groups. Participants will engage with real-world implementations of terminology services integrated into repository interfaces (via API usage) and metadata pipelines, supported by interactive elements such as live polling, search challenges, and guided discussion. By bringing together repository managers, researchers, and data stewards, the workshop fosters exchange between technical and conceptual perspectives and supports community-driven learning. Overall, the workshop aims to lower barriers to adopting terminology services, strengthen awareness of their strategic importance for FAIR data, and stimulate discussion on scalable and sustainable implementations across research infrastructures.

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

Other

### **Alternative Track**

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

repository managers, metadata experts, researchers, data stewards, and all interested participants

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

35

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

Beamer would be nice

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**Sitzung Einordnung:** WORKSHOPS

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