



Beitrag ID: 31 Beitragskennung: W04

Typ: Workshop (Short)

## From Chaos to Clarity: Smart Sample Management with LinkAhead & O2A SAMPLES

LinkAhead is a flexible open source toolbox for research data that adapts easily when workflows or requirements change. It offers a clear web interface, programmatic access and a semantic structure that can be extended for many different research contexts.

In this workshop we will introduce LinkAhead and demonstrate how it supports O2A SAMPLES, a sustainable and interoperable platform for transparent, FAIR compliant and AI ready sample metadata. O2A SAMPLES enables reliable sample registration, storage tracking and Nagoya documentation, and connects smoothly with Helmholtz infrastructures. With well defined workflows, QR based tracking and fully documented procedures, it provides an efficient and collaborative approach to managing samples from field collection to digital archive. This unified framework strengthens reproducibility, accessibility and discoverability, enabling efficient digitization and collaboration across the entire sample lifecycle.

In this workshop, participants will first get to know the open-source research data management software LinkAhead [1, 2] which is the basis of the O2A SAMPLES platform at AWI. We will introduce LinkAhead's datamodel and webinterface including hands-on examples of how to query for, insert, and edit data entries in LinkAhead. We will then continue with an introduction of the O2A Samples platform with its sample and storage management workflows. Participants will learn how samples are registered, and how to export and update their metadata. An outlook will be given on configuring and adapting the sample management module [3] to the participants' (or their institutions') needs.

[1] <https://doi.org/10.3390/data4020083>

[2] <https://gitlab.com/linkahead/>

[3] <https://gitlab.com/linkahead/linkahead-sample-management>

### ONLY WORKSHOPS - Proposed interaction format

Tutorial

### Alternative Track

### ONLY WORKSHOPS - Tentative audience

Data stewards and data managers, researchers

### ONLY WORKSHOPS - Maximum number of participants

20

### ONLY WORKSHOPS - Special technical requirements

Projector, Whiteboard

**Autoren:** REBKE, Maren (AWI); SPRECKELSEN, Florian (IndiScale)

**Vortragende:** REBKE, Maren (AWI); SPRECKELSEN, Florian (IndiScale)

**Sitzung Einordnung:** WORKSHOPS

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