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Workshop 8: Federated and FAIR: Scalable Data Management with Aruna v3 (Part II)

Wednesday 1 October 2025 15:30 (1 hour)

Modern microbiome research, as addressed by NFDI4Microbiota, depends on scalable and interoperable infrastructures. Aruna v3 introduces a federation-first approach to research data management, eliminating central coordination while preserving institutional autonomy. Built on peer-to-peer technologies, Aruna ensures secure and efficient metadata replication, data locality-aware compute integration, and governance across distributed domains.

The attendees of this workshop will be introduced to the Aruna Version 3 architecture and its new features. Furthermore, the presentation will comprise a demonstration of practical applications within the field, in addition to the provision of a set of guidelines on the establishment of FAIR-compliant data pipelines for the management of research data that is both scalable and secure.

Presenters: HOCHMUTH, Jannis (Justus-Liebig-University Giessen); BREHM, Lukas (Justus-Liebig-University Giessen)

Session Classification: From Pipelines to Portals: Next-Generation Tools for Microbiome Analysis