The Julich-Brain Atlas at EBRAINS - Introduction, Concepts and Hands-on Sessions



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Share, explore, and reuse data and knowledge in EBRAINS - an overview

Thursday 20 June 2024 13:00 (1h 30m)

EBRAINS is an open, digital research infrastructure (RI) where scientific researchers, clinicians, and other experts from various disciplines converge to share, explore and reuse complex, heterogeneous data in the field of neuroscience. At its core, EBRAINS aims to establish a user-friendly FAIR data and knowledge implementation in a centralized management system, called EBRAINS Knowledge Graph (KG), that empowers other services and researchers to seamlessly connect and integrate various neuroscience data into a suite of specialized tools, computational models, and workflows.

This session is divided into two parts. The first part will introduce how to interactively and programmatically explore and reuse data and knowledge shared through EBRAINS. It will cover demonstrations of the search and filter functionalities of the KG Search User Interface (UI), and corresponding programming patterns in the KG Core Python Software Development Kit (SDK). The second part will provide an overview on how to share data and knowledge through EBRAINS via its curation service. It will demonstrate common data management principles, guidelines for data descriptors, and linked data representations in database systems. For the latter, the session will give an introduction to the openMINDS metadata framework, and demonstrate respective tooling for entering linked data representations into the EBRAINS KG.

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