

Advancing data management and analysis in different scientific disciplines

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Over the past several years, rapid growth of data has affected many fields of science. This has often resulted in the need for overhauling or exchanging the tools and approaches in the disciplines' data life cycles, allowing the application of new data analysis methods and facilitating improved data sharing.

The project Large-Scale Data Management and Analysis (LSDMA) of the German Helmholtz Association has been addressing both specific and generic requirements in its data life cycle successfully since 2012. Its data scientists work together with researchers from the fields such as climatology, energy and neuroscience to improve the community-specific data life cycles, in several cases even all stages of the data life cycle, i.e. from data acquisition to data archival. LSDMA scientists also study methods and tools that are of importance to many communities, e.g. data repositories and authentication and authorization Infrastructure.

In this presentation, we will discuss selected highlights of LSDMA's research and development activities. Specifically, we will address how the results have advanced the user communities in their data-driven research. We will conclude with the lessons we have learned in the past few years.

Primary Keyword (Mandatory)

Experience/plans from outside experimental HEP/NP

Tertiary Keyword (Optional)

Secondary Keyword (Optional)

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