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Conference Abstract

## General introduction to DINA

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Abstract

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The DINA Consortium ("**DIgital information system for NAtural history data**", <u>https://dina-project.net</u>, Fig. 1 was formed in order to provide a framework for like-minded large natural history collection-holding institutions to collaborate through a distributed Open Source development model to produce a flexible and sustainable collection management system. Target collections include zoological, botanical, mycological, geological and paleontological collections, living collections, biodiversity inventories, observation records, and molecular data.

The DINA system is architected as a loosely-coupled set of several web-based modules. The conceptual basis for this modular ecosystem is a compilation of comprehensive guidelines for Web application programming interfaces (APIs) to guarantee the interoperability of its components. Thus, all DINA components can be modified or even replaced by other components without crashing the rest of the system as long as they are DINA compliant. Furthermore, the modularity enables the institutions to host only the components they need. DINA focuses on an Open Source software philosophy and on community-driven open development, so the contributors share their development resources and expertise outside of their own institutions.

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One of the overarching reasons to develop a new collection management system is the need to better model complex relationships between collection objects (typically specimens) involving their derivatives, preparations and storage. We will discuss enhancements made in the DINA data model to better represent these relationships and the influence it has on the management of these objects, and on the sharing of information. Technical detail of various components of the DINA system will be shown in other talks in this symposium followed by a discussion session.

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