

## Schema Evolution in Research Data

*Monday, March 11, 2024 4:00 PM (30 minutes)*

Changes occur frequently, especially in data-driven long-term studies. Changing databases lead to the accumulation of many schemes and instances over time. However, any scientific application must be able to reconstruct the historical data to ensure the reproducibility or at least the explainability of the research results. A method is needed that allows each database version to be easily reconstructed at both the schema and data level, and data to be migrated between the different versions. Storing all versions over time is not a feasible solution, as it is often too expensive and storage-consuming. In contrast, a method that allows backward processing to earlier versions of the database guarantees the recoverability of the stored information without keeping different versions. This is the subject of our current research, where we use evolution with provenance and additional information to facilitate the reproducibility of scientific results over long periods of time. In this way, information loss can be avoided or at least reduced.

### Type of Poster

**Presenter:** AUGE, Tanja (U Regensburg)

**Session Classification:** Talks

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