# Session 3.2

##### Session 3.2 (SEMANTiCS)

#### Time: Thursday, September 19, 2024 - 10:30 to 12:00

#### Chair: TBA

## **Talks**

### Semantic Data Management and Smart Search at Sopra Steria [SP]

| Peter MikaSopra Steria |
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### A Semantic Layer for Data Spaces: how interlinked vocabularies provide interoperability inside and between Data Spaces

| Robert David | Martin Kaltenböck SWC |
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### What do we Annotate when we Annotate? Towards a Multi-Level Approach to Semantic Annotations

Purpose: Annotating is considered a 'scholarly primitive' among different fields in the humanities. Nevertheless, the debate on digital annotations has mostly focused on the annotation of textual data, whereas existing models for representing annotations of images still lack sufficient semantic richness to anchor the annotation itself to multiple conceptual levels. We address the challenge of defining a data model to overcome the problem of ‘semantic deficit’ in this application domain. Finally, we implement an annotation client for testing multi-level semantic annotations.

Methodology: To define a data model for representing digital annotations, we analysed applications which support annotation images through IIIF protocol, focusing on digital representations of palimpsests. We then extended the Web Annotation Data Model by introducing domain standards such as LRMer, CIDOC-CRM, and HiCo. We also validated the model through SPARQL queries corresponding to five competency questions to report on satisfiability. Finally, we developed a prototype annotation client as a plugin for Mirador to evaluate its performances in real-world scenarios.

Findings: The results indicate that our model can effectively disambiguate between a target image and multiple conceptual levels of the entity itself, proving to be decisive in the representation of entities that coexist in the same material item (e.g., palimpsests). Additionally, the model allows users to describe annotations as interpretative acts, incorporating scholarly criteria and multiple viewpoints. An interface plugin enables scholars without technical expertise to create structured annotations that comply with the model.

| Maria Francesca Bocchi | Carlo Teo Pedretti |
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| Francesca Tomasi | Fabio Vitali |

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### Elvin Dechesne Talk title: Implementing a Data Fabric for the Water Authority of Limburg

| Elvin Dechesne |
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