



SFB/TR 8 Spatial Cognition / IQN Video Conference

## Dr. Christoph Lange University of Birmingham

## Linked Open (Geo)Data and the Distributed Ontology Language – a perfect match

The Distributed Ontology Language is a meta-language for integrating ontologies written in different languages. Our notion of "distributed" comprises logical heterogeneity within ontologies, modularity and reuse, and links across ontologies in different places of the Web. Not only can ontologies be distributed across the Web, but DOL's supply of supported ontology languages can also be extended in a decentral way. For this functionality, DOL builds on the Linked Open Data (LOD) principles. But DOL also contributes to LOD use cases. Many current LOD applications are limited by the weak expressivity of the RDF and RDFS languages commonly used to express data and vocabularies. Completely switching to a more expressive language would DOL addresses the scalability and impair scalability to big datasets. expressivity requirements by allowing to represent each aspect of a dataset in the most suitable language and keeping these different representations connected. This is particularly useful in geographic information systems, where big datasets (e.g. Linked Geo Data, the LOD version of OpenStreetMap) need to be integrated with formalisations of complex spatial notions (e.g. in the first-order language Common Logic).

informelle Kaffeerunde: 15:15 Vortragsbeginn:15:30

- Rotunde Cartesium, Enrique-Schmidt-Str. 5 Universität Bremen
- Geb. 106, Raum 04 007, Universität Freiburg

Prof. C. Freksa, Ph.D. freksa@informatik.uni-bremen.de 0421 – 218 - 64230





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