Presentation title

Space Vocabularies: Research, Development, Alignment, and Formalization (RAFD) in Astronomy and Astronautics

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Abstract

Applying conceptual, terminological, semantic, and ontological analysis to spaceflight and space sciences such as astronomy, the author describes their Space Knowledge Organization and Modeling project. With origins in 2011, the project conducts research and development of vocabularies and other knowledge organization systems (KOS) for astronautics and astronomy related topics. Specific research and activities include knowledge representation and reasoning, and other modeling and formalization processes. The ongoing development of domain and application specific vocabularies, other KOS, and proposed standards will be introduced. Alignment or harmonization of these systems, including external existing systems and relevant (inter)national standards, is another project track and goal. The concept of knowledge networks in relation to so-called knowledge commons, among other concepts such as FAIR and contemporary AI techniques, will likewise be summarized. In all, the project hopes to support and innovate for space data, sciences, and activities, and help address challenges therein. The project and author are actively open to formal support, including patrons, partners, work and study opportunities to sustainably pursue this promising line of research. Interested parties are encouraged to make contact.

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