

Unified Astronomy Thesaurus

Executive Summary

Overview

The Unified Astronomy Thesaurus (UAT) is an open, interoperable and community-supported thesaurus of astronomical and astrophysical concepts and their relationships. Management of the UAT is based on a community-supported approach to ensure the thesaurus stays current by allowing anyone to suggest an addition or revision which will then be subjected to a thorough expert review process. The UAT is supported by many leading astronomical institutions, professional associations, journal publishers, learned societies, and data repositories as a standard astronomical terminology.

Objectives

The UAT is meant to be:

Open: anyone interested in astronomy can use the UAT and contribute to it by suggesting additions, refinements, revisions, and modifications to thesaurus terms or relationships;

Interoperable: the UAT is available in a standard format (such as SKOS) so that its concepts can act as a bridge between disparate systems and be embedded into a variety of applications; and

Community-supported: the UAT is supported by major stakeholders within the astronomical community for the benefit of all.

Curation Process

Because astronomy is a fast-changing field, the UAT leverages the expertise of the astronomical community to keep the thesaurus current. Anyone can suggest new terms or revisions to existing terms and/or relationships in the UAT via a web form. Every suggestion must be supported by literature references, undergo a review and vetting process, and be approved by one or more members in the scientific community with domain knowledge before being implemented. An astronomy librarian will ensure the long-term stability of the UAT, maintain versioned releases, oversee the overall curation process, and manage outreach activities.

Governance

Governance and management of the UAT, including setting the overall direction of development of the thesaurus, is overseen by a stewarding group, which includes representatives from the AAS, the CfA, and SAO/NASA ADS. The stewardship group also works with advisors from the publishers and professional societies, such as IOP and AAS. The astronomy librarian, in addition to the duties outlined above, monitors and manages communications between these parties and the UAT editors.

Purpose

Condensing astronomy and astrophysics keywords into a standard thesaurus creates a formalized source from which vocabulary words can be drawn to enhance literature searching and indexing. Additionally, these same terms and relationships can be used to describe datasets, instruments, and astronomical objects. Using a unified language of descriptors across these platforms will allow for increased connections between data and literature. Using a unified language to describe these resources will allow an increased level of connectivity between data and content, as well as improve their discoverability.

For more information please visit <http://astrothesaurus.org>.