The Unified Astronomy Thesaurus (UAT)
A consensus thesaurus for astronomy
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Overview
The Unified Astronomy Thesaurus (UAT) will be an open, interoperable and community-supported thesaurus which unifies the existing divergent and isolated Astronomy & Astrophysics thesauri into a single high-quality, freely-available open thesaurus formalizing astronomical concepts and their inter-relationships. The UAT builds upon the existing IAU Thesaurus (see ‘Origins’). We expect that the Unified Astronomy Thesaurus will be further enhanced and updated through a collaborative effort involving broad community participation.

The UAT’s main goals are to be:
- open: anyone in the community can contribute by suggesting additions, refinements and revisions – the thesaurus itself will be released under a CC-BY-SA Creative Commons licence;
- interoperable: the thesaurus is in a standard format;
- community-supported: the UAT is already supported by major stakeholders in the astronomical community (including journal publishers and professional societies like the IAU, AIP, IoP and AAS).

The current draft release is a polyhierarchy with 2305 terms, 15 top concepts, and with the majority of the terms 2–4 levels down from the top. There are 224 related links in the thesaurus.

Potential/expected uses
The main driver behind the creation of a single thesaurus is the wish to support semantic enrichment of the literature, but we anticipate broader use of the UAT among other vocabularies in data and service discovery applications, and that the UAT will underpin and inspire a new range of cross-silo data-sharing applications.

Origins
The UAT is equivalent to the astronomy section of the all-physics thesauri commercially developed for the American Institute of Physics and the Institute of Physics and donated by them to the AAS. This is ultimately based on the 1992 IAU Thesaurus of Shobbrook and Shobbrook, with subsequent additions from Helen Knudsen, Marlene Cummins and Liz Bryson, influence from the consensus list of journal keywords, and, in the late 2000s, updating work by Rick Hessman under the auspices of the IVOA.

Get the thesaurus
You can find more information about the UAT project at [http://astronomy.uat.org](http://astronomy.uat.org).

The thesaurus is currently in ‘closed beta’, while we finalise how the work will be managed and distributed (this will include a SKOS thesaurus). To express your interest in contributing to the UAT or using the UAT for development purposes, join the google group [https://groups.google.com/d/forum/urat-users](https://groups.google.com/d/forum/urat-users).

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