Using the UAT thesaurus to annotate catalogue descriptions in VizieR

IVOA interoperability meeting,
Victoria, May 31 2018

S. Derriere

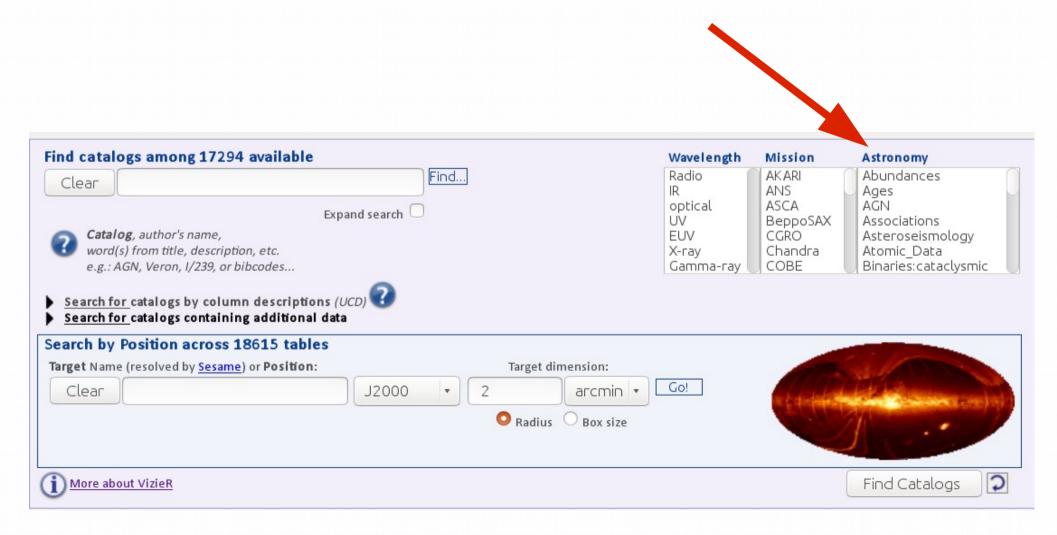CENTRE DE DONNÉES
ASTRONOMIQUES DE STRASBOURG

VizieR keywords

- Documentalists assign keywords to each VizieR catalogue (in ReadMe)

  - 305 ADC keywords

- These keywords are mapped in DB to a limited list of VizieR terms (76 terms for astronomy)

Abundances	Abundances
Abundances, [Fe/H]	Abundances
Abundances, peculiar	Abundances
Accretion	
Active gal. nuclei	AGN
Associations, stellar	Associations
Asteroids	Planets+Asteroids
Astrographic zones	
Astrometric data	Positional_Data
Atlases	
Atomic physics	Atomic_Data
Attitude determination	
BL Lac objects	BL_Lac_objects
Balmer lines	Photometry:narrow-band
Bibliography	
Binaries, X-ray	Binaries:cataclysmic
Binaries, X-ray	sources
Binaries, cataclysmic	Binaries:cataclysmic

VizieR keywords search

- Search by astronomy keyword

VizieR keywords in Registry

- The VizieR keywords are used in the VOResource <subject> elements

```
– <content>
    <subject>Open_Clusters</subject>
    <subject>Spectral_Classification</subject>
    <subject>Photometry:wide-band</subject>
```

- Pro : homogeneous description across all resources

- Con : limited vocabulary

UAT : Unified Astronomy Thesaurus

- http://astrothesaurus.org/   2018ApJS..236...24F

- See A. Accomazzi's presentation (10/2016)

  - http://wiki.ivoa.net/internal/IVOA/InteropOct2016Semantics/UAT -Update2016.pdf

- Current version 2 (January 2017)

  - v3 of thesaurus in preparation (planned 09/2018)

- Usage is broadening

  - Collaboration with AAS, journal editors

  - Classification of HST & JWST proposals

  - Recommended terms for <subject> from VOResource 1.1

VizieR to UAT mapping

- Nearly all terms have proper correspondance
- Good idea to change all VizieR catalogue <subject> to UAT terms
  - But keywords could be more precise
- Use UAT terms from the beginning in VizieR ?
  - Need to be integrated into ingestion pipeline
  - Training of VizieR documentalists