Semantics session

Vocabularies

Vocabulary slide showing the IVOA Recommendation document cover:

International Virtual Observatory Alliance

IVOA Documents

Vocabularies in the Virtual Observatory
Version 1.19

IVOA Recommendation 07 October 2009

Interest/Working Group:
http://www.ivoa.net/twiki/bin/view/IVOA/IvoaSemantics

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Vocabularies

- Currently available vocabularies :
  - IAU Thesaurus 1993
  - A&A journal keywords
  - AOIM
  - UCD
  - IVOAT

- http://www.ivoa.net/rdf/Vocabularies/

- Strong need for mapping between vocabularies !
  - http://explicator.dcs.gla.ac.uk/code/
  - can be handled by external files

Semantics WG

Vocabularies

- Supporting other WGs in developing the vocabularies they need
  - reuse from above
  - extend, create new ones ?
- Need expressed from
  - VOEvent
  - DM for Characterization, ObsTAP
  - Registry : creating/querying VOResources

Semantics WG

Dictionaries

- Explain
  - vocabulary words
  - utypes
  - UCDs
- Reference lookup for
  - explanation of terms
  - examples of use, ...
- Host these on IVOA website ?

Semantic annotations

- Annotations sharing
  - SKUA project
- Annotations for the Semantic Web

Semantics WG

RDFa for astronomers

1	02 40 01.1-01 36 45	a	A370 Field 2
2	14 49 28.2+26 07 57	b	Cl 1447+23
3	00 26 35.6+17 09 43	c	Cl 0024+16
4	09 43 02.6+46 58 57	d	Cl 0939+47
5	09 43 02.5+46 56 07	e	Cl 0939+47 F2
6	03 06 15.9+17 19 17	f	Cl 0303+17

- samp.MType : coord.pointAt.sky
- samp.params :
  - ra=decimal degrees
  - dec=decimal degrees

RDFa for astronomers

- Add semantic annotations to "02 40 01.1-01 36 45"

```
<td    xmlns:ivoa="http://ivoa.net/samp/1.11/"
       about="http://ivoa.net/samp/"
       property="ivoa:pos"
       content="coord.pointAt.sky">

       <span property="ivoa:pos.eq.ra"
             content="040.0046">
             02 40 01.1
       </span>
       <span property="ivoa:pos.eq.dec"
             content="-1.6125">
             -01 36 45
       </span>
</td>
```

Future of Semantics WG