

Usage of RDFa / microformat for IVOA

*Sébastien DERRIERE, CDS
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RDFa : New technology ??

- W3C standard
 - RDFa 1.0 Recommendation October 2008
 - RDFa 1.1 Recommendation June 2012
 - Allows non-XML docs, like HTML4 or 5
- RDFa for IVOA : already presented
 - ADASS 2009, Sapporo
 - Firefox plugin for SAMP messages
 - Naples Interop 2011
 - Tagging object names for tooltips

RDFa example

```
<p xmlns:dc="http://purl.org/dc/elements/1.1/"  
  about="http://www.example.com/books/wikinomics">  
  In his latest book  
  <cite property="dc:title">Wikinomics</cite>,  
  <span property="dc:creator">Don Tapscott</span>  
  explains deep changes in technology,  
  demographics and business.  
  The book is due to be published in  
  <span property="dc:date" content="2006-10-01">October 2006</span>.  
</p>
```

Use case: point there !

- 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>
```

RDFa for SAMP

- Vocabulary = SAMP mTypes
- Browser plugin (but could be JS only)

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

1	✦ 02 40 01.1-01 36 45	a	A370 Field 2
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Microformat for objects

- Tag astronomical objects in documents
- `Beehive`
- JS to add remote content to documents

- M1 is the Crab nebula
- The Beehive cluster is listed as M44, aka Praesepe
- There is a M 04, The Sombrero galaxy

M 44
08 40 24 +19 40.0



New interest for RDFa ?

TAP examples

- Markus Demleitner pleads for embedding TAP examples in HTML documents with RDFa
 - See Interop Urbana 2012 presentation

RDFa for DALI examples

- Section 2.3 of DALI 1.0 document explains how to embed examples with RDFa in documents
 - Allows interpretation by machines
- Application : piece of JS that interprets the RDFa and automatically adds the HTML forms to test the examples

RDFa for DALI examples

Example: DataLink Request for IRIS Image (GET)

In this example, we get all the links for a dataset. To get all the links to resources related to this dataset, we simply call the DataLink service with a single parameter:

GET: <http://beta.cadc-ccda.hia-ihc.nrc-cnrc.gc.ca/caom2proto/datalink?URI=caom:IRIS/f212h000/IRAS-25um>

```
<div id="ex1" resource="#ex1" typeof="example">
  <h2 property="name">Example: DataLink Request for IRIS Image (GET)</h2>
  <p>
    In this example, we get all the links for a dataset. To get all the links to resources related to this dataset,
    we simply call the DataLink service with a single parameter:
  </p>
  <p>
    <span property="http-action" content="GET">GET</span>:
    <b>
      <span property="base-url">http://beta.cadc-ccda.hia-ihc.nrc-cnrc.gc.ca/caom2proto/datalink</span>?<span property="generic-parameter"
        typeof="keyval"><span property="key">URI</span>=<span property="value">caom:IRIS/f212h000/IRAS-25um</span>
      </span>
    </b>
  </p>
</div>
```

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Try ex1

Conclusions

- Develop test applications when designing RDFa specifications (ex : DALI examples could be clearer)
- The technical side is ready :
 - Browser JS support
 - JS Toolkits like jQuery
 - Web SAMP
 - Bookmarklets, ...
- Are we ready for providing more RDFa in our documents – and make use of it ?