

# Long-term Web Identifiers in the VO

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distinguish...

- 1. references to literature (DOIs do most of the work)
- 2. references to other documents and resources  
(smallish number, not very high volume)**
- 3. references to datasets (and possibly data items)

This talk will concentrate on the second set of URIs. The first set is largely sorted, and the third set presents different problems (which people are working on).

Set 3 solutions *may* solve set 2 problems as well.

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## why, and why now?

- URIs are increasingly becoming *the* source for a document, standard or other resource
- SemWeb and Linked Data technologies rely on URIs being stable, and *should* be dereferenceable
- IVORNs work in principle, but no-one outside astronomy can dereference them
- `dx.doi.org` is a DOI->HTTP naming gateway

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for example

- FITS: various long-term URIs. Naturally minted under `fits.gsfc.nasa.gov`, though FITS has gone from multilateral, to NASA, to IAU
- IVOA SKOS vocabs: naturally `www.ivoa.net/rdf`
- SIMBAD objects?: `u-strasbg.fr` or `unistra.fr` or what?
- VOEvent: not exclusively IVOA, so some other domain?

- The timescale is that on which domains like nasa.gov, u-strasbg.fr or ivoa.net will change
- ...which is not the same as the timescale on which the organisations will change (though they're coupled)
- ...nor the timescale on which DNS will be replaced

- Preserve for 100 years (300? 1000?)
- ...so robust in the face of technology change
- ...and robust w.r.t organisational change
- Usable (scribbleable?)
- Branding can be important (funding!), but is dangerous; neutral/unbranded/opaque identifiers are safest

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## relevant documents

- <http://www.astro.gla.ac.uk/users/norman/ivoa/long-term-uris.html>

- Alberto: at Nara (2010), at Boston ADASS (2010) and Boston AAS (May 2011)

- Juha Hakala (National Library of Finland): <http://metadaten-twr.org/2010/10/13/persistent-identifiers-an-overview/> (a *very* good overview!)

- DataCite: <http://datacite.org>

■ ARK: <http://www.cdlib.org/services/uc3/curation/ark.html>

■ EZID: <http://www.cdlib.org/services/uc3/ezid/index.html>

■ PURL: <http://purl.org>

■ DOI: [http://www.doi.org/handbook\\_2000/appendix\\_1.html](http://www.doi.org/handbook_2000/appendix_1.html)

For the sake of discussion, how about creating PURLs  
under <http://purl.org/astronomy/>?

(We've been using this already, for the TheoryWG vocabularies)