

UCD Updates

IVOA InterOpNov2025

Semantics

SKOS modeling proposal

- Each UCD is a Concept
- Hierarchy : discussion if needed
- How to handle Syntax Code (Q, S, P, ...)? two main options :
 - SKOS Collections
 - **Create a property `ivoasem:UCDSyntaxCode`**

Class

Concept

Scheme

Collection

Property

Datatype

A

C

arith (en)

arith.diff (en)

arith.factor (en)

arith.grad (en)

arith.rate (en)

arith.ratio (en)

arith.squared (en)

arith.sum (en)

arith.variation (en)

arith.zp (en)

em (en)

em.bin (en)

em.energy (en)

em.freq (en)

em.freq.cutoff (en)

em.freq.resonance (en)

em.gamma (en)

arith.factor (en) x +

http://www.ivoa.net/rdf/ucd#

arith.factor

Rename

Broaders:

skos:broader

arith (en)

Lexicalizations:

skos:prefLabel

arith.factor

Notes:

skos:definition

Numerical factor

collections:

skos:member

P (en)

Other properties:

Example with the Ivoasem Property

```
:arith.factor a skos:Concept;  
    skos:definition "Numerical factor"@en;  
    skos:inScheme :UcdScheme;  
    skos:prefLabel "arith.factor";  
    skos:broader :arith .  
    ivoasem:UCDSyntaxCode "P".
```

Pending question

Currently, UCD are managed with the UCD group, it is a versionned vocabulary, based on endorsed notes.

More info :

<https://wiki.ivoa.net/twiki/bin/view/IVOA/UCDListMaintenancePage>

Questions :

- Shall we keep the versioning ?
- Shall we continue the Endorsed Note process ?