Discussion HEIG/Semantics
Finalizing the draft of HEIG Note for ObsCore extension

Discussion Wednesday June 10

A) Vocabularies
Mime types proposed : x-ogip-fits and ?
check the syntax .

Data product-type :
BC: Event-list has another meaning in planetary science
consider to change the proposed *event-list* currently proposed to *he-event-list,*
more precise .

In the note , cite the VEPs proposed for response-type
and VEP for analysis-product-type
end of section 5.1

We would need to split table 1 in 3 parts .
Mireille : I can make a proposal for this .

B)UCD and column types
Change em.gamma from S to Q —> ok , VEP-UCD changed accordingly.

PDG id : can be introduced in the meta branch as meta.ref.pdg_id and used as meta.ref.pdg_id;phys.particle

How to handle the « messenger » column in ivoa.obscore-hea?
What is the value and content type ?

Currently we propose to have names , and possibly some pdgid codes .
These cannot be validated easily whether they are names from a vocabulary or codes from an external standard.

Suggestion to have 2 columns :
messenger_name string Label defined in an external vocabulary .
e.g. photon, electron, cosmic, etc.
messenger_pgdid integer Pdgid corresponding to the particule involved /
E.g +16 -16
More precise for neutrinos observations

Semantics has agreed on revisiting phys.flux definitions
From a list of concepts proposed for a list of UCDs

How to designate an event :
Related to events : agreed to use instr.detection;phys.particle , in order to clarify the kind of detection
we consider.

Discussion on the definition of event_grade: depends on the patterns of connected cells on the detector.
Instrument dependent.
In Fermi : same decision : it is also a matter of pattern

event_grade : meta.code.class;instr.detection;phys.particle
event_type: meta.code.qual;instr.detection;phys.particle
Proposal for the note.

Semantics : Revision of term
src defined as : Astrophysical source or phenomenon —> VEP
TO DO: write a VEP for this

instr.pulse; OK
Allows variable properties too as instr.pulse;arithmetic.sum , instr.pulse;stat.fwhm, etc.

Check
phys.particle.* hierarchy

Upperlimit : detections / Cut-off /
If you did not detect above such flux value ...
Upperlimit at confidence level
agreed to add in UCDs vocabulary
TO DO: create VEP and propose a definition and a file example for the Used-in: feature

o_ucd field in main Obscore Table ;
has several drawbacks:

- Not precise enough to be useful for search
  - Need parsing, of various terms
  - too verbose but too vague
  - too much instrument dependent.
  - was not meant for the event-list case

Defining the possible contents of the observable axis would be easier to cover with IVOA Vocabularies.
This work can be started within HEIG and Semantics groups and is related to the clarification on flux definitions.

Emphasis of the usage of vocabularies is foreseen for ObsCore2
This is also a good timing to develop these vocabulary

MCD: Not to consider for migration step to Obscore 2.0