

2+1 THEORY SESSIONS

Theory Session 1: Tuesday, Nov 10 10.30–12.00

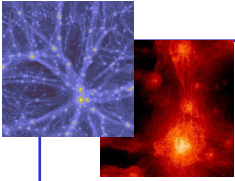
Data Model and Access Protocols

Theory Session 1+1/2: Tuesday, Nov 10 16.00–18.00

Convergency and intgeration of standards

Theory Session 2: Wednesday, Nov 11, 14.00–15.30

Demo Session



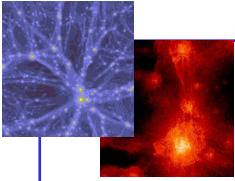
Discussion **topics** and **actions**: 1. Simulation Data Model, SimDM

The model is mature to be moved to a working draft to be **submitted** the DM WG (to become finally a recommendation).

Two documents (description and UML representation) + XML schema almost ready

Some issues are still to be solved

- Reference implementations (almost solved, see next slides)
- Adoption of a vocabulary (SKOS)
- Registration issues
- ...



Discussion **topics** and **actions**: 2. SimDM based services

SimDB Services: Theoretical data can be made searchable and accessible by means of SimDB-like services, which are registered services that adopts (part of/specialization of) SimDM.

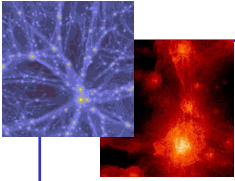
Expected implementations

SimDB-TAP

S3 like services

SimDAP services

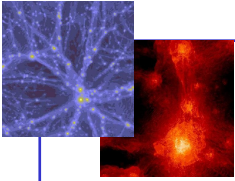
A specific effort will be performed by S3 and SimDAP developers in order to integrate with SimDM.



Discussion topics and actions: 3. Theory compliant applications

S3 developers pointed out how few VO-compliant applications can discover and handle theoretical data and services (like those provided by VOSA or BASTI)

S3 group will lead the effort to “fill the gap” between theory and other IVOA WGs (as APPs or DAL)



Discussion **topics** and **actions**: 4. Data Access Applications

Simulation Data Access protocol has not evolved too much, but it is not far from being specified in all details. Main open issues are

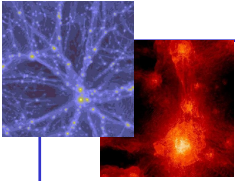
- Metadata and Query (TAP-like) services → SimDB/TAP? S3 like?
- Cutout/Download response → specify the format
- What kind of preview?

S3 express the interest for a selection function similar to the Cutout (but on general variables)

SimDAP could be similar to S3 for metadata access and data discovery.

SimDAP and S3 groups will coordinate the effort in order to produce a single protocol

Some differences in preview vs. summary...



Discussion topics and actions: 5. Existing services

SimDB implementation @ VO Paris Data Center (France VO)

- PDR database (photodissociation regions)
- Starformat (MHD simulations of ISM)
- DEUVO (Dark Energy Virtual Observatory)



**Reference implementations
for SimDM**

VOSA, a VO Spectral Energy Distribution Analyzer (Spanish VO)

Asteroseismology service (Spanish VO)

Basti for stellar model simulations (Italian VO)

VisIVO web/server for visualizing cosmological simulations (Italian VO)