

Theory Interest Group

Cosmological simulations on science platforms

with GWS

Wed Nov 18, 20:30 UTC

Theory needs special attention

- Hard to standardize simulations
 - Observational standards do not apply
- Heterogeneity of data products
 - not just photons at time T from direction V with energy E and polarization P
- No common sky
 - what to query?
- No common objects
 - what to compare, cross-match?

Theory Interest Group

- Represents theorists to IVOA
- Represents IVOA to theorists
- 2 standards:
 - Simulation Data Model (SimDM):
 - Kinda registry for simulation products
 - Simulation Data Access Layer (SimDAL)
 - <https://ivoa.net/documents/SimDAL/20170320/index.html>
 - Discovery and retrieval of simulation products
- I think fair to say not much take up

Session with GWS

- How can science platforms help in disseminating cosmological simulations
 - Focus on largest, hardest to retrieve, data products
- Talks:
 - Bridget Falck
 - Simon O'Toole
 - Stefano Russo
- Discussion
 - Use cases for publishing simulations on science platforms
 - link to observational surveys
 - Maybe: Standard framework for publishing (python) libraries for accessing specific simulations (ala astroquery)
 - E.g. yt
- With GWS: 0.5 day workshop in ~Feb to make some plans