Interop May 2021
Closing summary
Theory Interest Group

http://wiki.ivoa.net/twiki/bin/view/IVOA/IvoaTheory

Gerard Lemson, Simon O'Toole

This interop: Mini workshop with GWS
Cosmological Simulations on Science Platforms

- How can science platforms help in disseminating <u>cosmological</u> simulations
  - Focus on largest, hardest to retrieve, data products

- 3 sessions: 13:30 UTC on Tue, Wed, Thu
  - https://wiki.ivoa.net/twiki/bin/view/IVOA/InterOpMay2021SPW

- 1st,2nd: talks by providers from the community
  - Examples and use cases for publishing simulations on science platforms
  - Examples of dissemination of big simulations and codes

- 3rd: towards interoperability and discussion on next steps
  - What can interoperability mean for simulations on science platforms?
  - E.g. Standard framework for publishing (python) libraries for accessing specific simulations (ala astroquery)

Very successful!

- Much easier to engage "outsiders" for short engagement when virtual

- Great presentations

- Good discussion

Time: Tuesday May 25 13:30 UTC

Speaker	Title	Time	Material
Simon O'Toole	Introduction	10'+2'	
Gerard Lemson	Cosmological simulations on the SciServer science platform	10'+2'	pdf
Jorge Carretero	Handling Cosmological Simulations at the Port d'Informació Científica (PIC)	10'+2'	pdf
Darren Croton	The Theoretical Astrophysical Observatory	10'+2'	pdf
Shy Genel	Data-sharing at the CCA: Binder and FlatHUB	10'+2'	pdf

Time: Wednesday May 26 13:30 UTC

Speaker	Title	Time	Material
Klaus Dolag	A web portal for hydrodynamical, cosmological simulations	10'+2'	pdf
Dylan Nelson	The IllustrisTNG Simulation Data Platform	10'+2'	pdf
Katrin Heitmann	Simulations for Large-scale surveys	10'+2'	pdf
Matt Turk	Infrastructure for Cosmological Simulations	10'+2'	slides
Andrew Benson	Disseminating Galacticus data through online platforms	10'+2'	pdf

Time: Thursday May 27 13:30 UTC

Speaker	Title	Time	Material
Brian Major	CANFAR Science Platform 2.0	10'+2'	pdf
Dave Morris	Can I do this?	10'+2'	pdf
Giuliano Taffoni	Final comments and summary	5'+2'	
ALL	Discussion	30	

Plans

- "external" participants interested in continuing the discussions
- Likely avenues:
  - Focus on discovery of the simulations on the platforms
  - Metadata about simulation from restricted, simplified, more expressive version of SimDM for cosmological simulations
  - Work towards getting sets of I/O libraries for different simulation formats under some kind of umbrella (astropy? astroquery? pyvo?)
    - yt good starting point
- Follow up workshop before next interop
- Joining mailing list and slack channel