Theory Interest Group at IVOA

22:00 UTC 27 April 2022

Chair: Gerard Lemson

Vice-chair: Simon O'Toole

Slack: #theory-ig - theory@ivoa.net

What is the Theory Interest Group?

- We are interested in how to best manage simulations and other theory data
- In particular what can we standardize and how can we follow the FAIR principles in an IVOA compatible way?
- We provide guidance on two standards: SimDM (DM WG) and SimDAL (DAL WG)
- We will run a brainstorming session with GWS on 27 April at 20:00 UT

Brainstorming session with GWS

Goals

We want concrete proposals using at least two science platforms for analysing/disseminating cosmological simulations

- → Represent and evolve a volume in 3+1 dimensional space-time, whatever its spatial size
- → We want to deploy data and software to the platforms and register their existence in a SimDB

Questions / Considerations

- Availability
 - Which science platform?
 - What kind of security is required?
- Platform types
 - Desktop oriented?
 - Notebook style?
 - Point and click?
- Capabilities
 - Can I deploy my own software/libraries?
 - What about file access or databases?
 - Interactive and/or batch mode

Questions / Considerations

• Data

- Can you bring your own data? If so, how?
- Or should data uploading be controlled?

Software

- Who has the codes for accessing simulations?
- Can we use containers?

Standardisation

- How to register simulations on a science platform? SimDB?
- What levels of standardization do we expect?
- What about interoperability between platforms?