

Theory session, today, 16:45-18:30, LAEFF

Goal:

- Create road map how to proceed with **use cases** effort.
- Plan next steps, assign tasks.

Session:

- Introduction
 - Overview theory IG
 - Recap current **use cases** effort
- Use case presentations ([list on theory Twiki](#))
concentrate on use of IVOA components
 - Solano
 - De Young
 - Walton
 - Le Petit
 - Lemson
- Discussion
- Conclusion

Twiki <http://www.ivoa.net/twiki/bin/view/IVOA/IvoaTheory>

Charter

The IVOA Theory Interest Group will:

- Provide a forum for discussing theory specific issues in a VO context.
- Contribute to other IVOA working groups to ensure that theory specific requirements are included.
- Incorporate standard approaches defined in these groups when designing and implementing services on theoretical archives.
- Define standard services relevant for theoretical archives.
- Promote development of services for comparing theoretical results to observations and vice versa.
- Define relevant milestones and assign specific tasks to interested parties

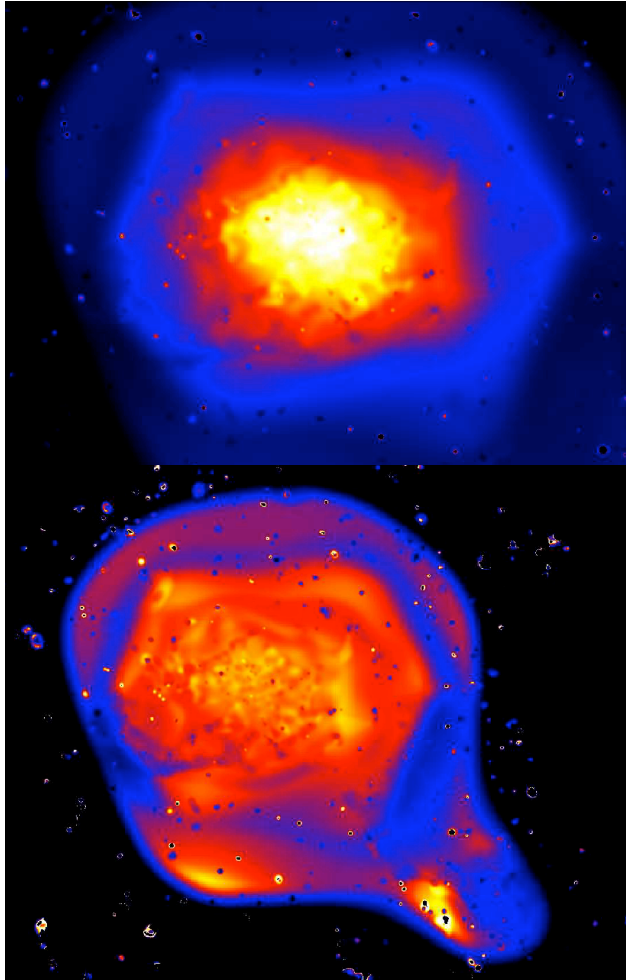
GAVO use cases

- [Theory SkyNode \(g-vo\)](#)
[use case](#)
- [Cluster structure \(g-vo\)](#)
[use case](#)
- [Virtual telescope configuration](#)

(TIG [use cases](#))

Clusters

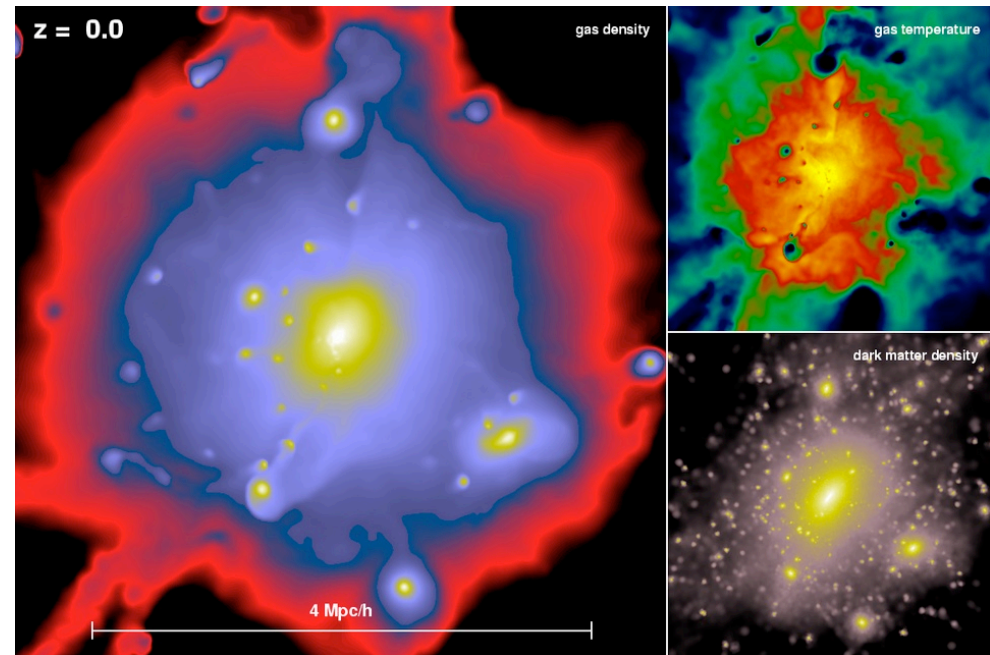
Observed



Thanks to Alexis Finoguenov, Ulrich Briel,
Peter Schuecker, MPE)

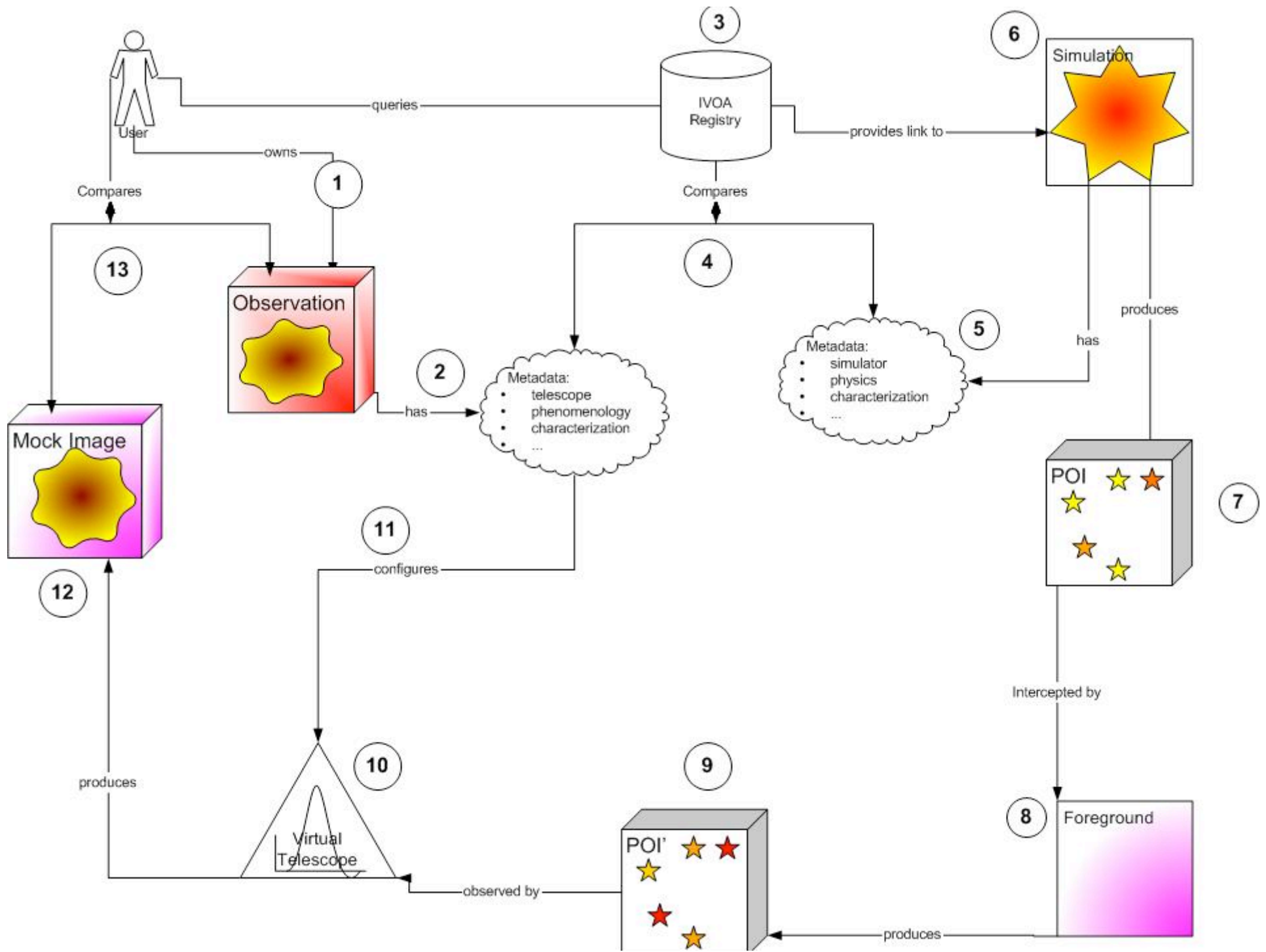
IVOA 2005/10/6

Simulated



Thanks to Volker Springel

Gerard Lemson



Discussion: roadmap

Conclusion(?) of current effort

- Requirements extraction and matching to WGs (discuss how to proceed)
- Initial prioritization unsupported requirements: on what timescale do we *need* support ?
 - “marketing”
 - “national” contacts
 - more use cases (and iterate) ??
- Result: write up as *Note* (single one or one per accepted use case+requirements ?)
v0.1 ..., v0.5 by ..., v1 by ... (do we need this much for a note ?)

Communication to WGs

- How do we do this so that they will act on this ? (WG chairs? TechHead? IVOA exec?)
- Revisit prioritization: on what timescale can we *expect* support ?
- Result (hopefully): action items on WG roadmap

WG activities (likely WG chairs will bounce ball back to us) :

- Specification of standards
- Prototype implementation, or better, adaptation of existing services
- Result:
 - Standards document cycle etc
 - Working applications

PR

- Notify “our” user community of these (and other theory VO) developments (how, where)
- Result: science done on theory-VO data and/or with theory VO-compatible services using VO-compatible standards

Matching use cases to WGs

	Reg	DM	DAL	G&WS	VOQL	UCD	VOTable
Synthesis models in VO (Solano)							
Determination of physical conditions in interstellar clouds (Le Petit)							
Multi wavelength analysis of interstellar clouds (Le Petit)							
Stellar Evolution in Globular Clusters (De Young)							
MHD Simulations of Astrophysical Jets (De Young)							
Tools for cosmological simulations: simulated S-Z maps (Walton)							
Theory SkyNode (Lemson)	✓				✓	✓	✓
Virtual telescope configuration (Lemson)	✓	✓	✓	✓		?	?
Structure of X-Ray clusters (Lemson)	✓	✓	✓	✓		?	

Requirements: Registry

- ...

Requirements: DM

- ...

Requirements: DAL

- ...

Requirements: G&WS

- ...

Requirements: VOQL

- ...

Requirements: UCD

- ...

Requirements: VOTable

- ...