

EURO



Science in the EURO-VO Era

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- AVO Science
- The Science Reference Mission
- EURO-VO Science

AVO Science

- AVO is over, long live EURO-VO!
- One of AVO's top priorities has been the pursuit of astronomy with VO tools, through:
 - Three science demonstrations
 - Journal and conference astronomical papers
 - A Science Reference Mission (SRM), to define the key scientific results that the EURO-VO should achieve
- All this also with the scientific advice of the Science Working Group (you!)

AVO Science

- AVO has produced REAL science tools, which can be (and are!) used for astronomical research:
 - AVO prototype is a very flexible toolset with plug-ins which allows easy access to images, spectra, and catalogues
 - ASTROGRID's workflow builder and MySpace are at cutting edge of VO development
- Interaction between astronomers and developers has been extremely good and beneficial to everybody

Science Reference Mission

Almost ready:

- 8 science cases received so far: 6 from the star sub-group and 2 from the galaxies/cosmology groups
- a galaxy cluster case been worked on by Dave De Young
- final document should be ready by the end of February (will be posted)

The AVO Science Reference Mission

- [SRM Cases](#)
- [Science Requirements from Euro-VO Partner Projects](#)
- [Background Material](#)

What is the Science Reference Mission (SRM)? The SRM is a definition of the key scientific results that the full-fledged, Phase B, EuroVO should be able to achieve when fully implemented. It will consist of a number of science cases, with related requirements, against which the success of the EuroVO will be measured.

SRM Cases

- [Circumstellar Disks](#)
- [Intermediate Velocity Clouds](#)
- [Which Star will go Supernova next?](#)
- [Initial Mass Function \(low masses\)](#)
- [Initial Mass Function \(high masses\)](#)
- [Low and intermediate mass stars contribution to the ISM](#)
- [Galaxy Formation and Evolution](#)
- [Build-up of Supermassive Black Holes](#)

EURO-VO Science

- EURO-VO funding situation still not well-defined, only VO-TC funded
- There will be a EURO-VO science body (advisory group?), whose composition is still TBD
- More complex role given the tri-partite nature of EURO-VO: Data Centre Alliance, Technical Centre, and the Facility Centre



EURO-VO and the Community

- AVO has reached out to the European astronomical community mostly through the SWG, plus papers and articles (ESO Messenger, ST-ECF & EAS Newsletters)
- EURO-VO will reach out to the data providers through a dedicated workshop at ESO (June 27 - July 1)
- We also plan to start having a presence at JENAM/EAS meetings, to contact directly (and get feedback from) astronomers (as the NVO does at the AAS)



SWG Input

- On:
 - Demo
 - AVO project (what worked, what didn't, etc.)
 - Science and the EURO-VO
 - Reaching out to the astronomical community