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# Outline

What is the VO?

The challenge

The IVOA

Demo

Putting it together



#### What is the VO?

A historical view: The Virtual Observatory (VO) is (or will be), a

comprehensive set of
data and services
relevant to astronomy
accessible from clients of your choice
regardless of where you are and
preserving products of digital astronomy.



## What it's (actually) not:

A bundle of software used to work with data in astronomy.

But of course you will find and use VO-client implementations in lots of software like TOPCAT, Aladin, Splat-VO or PyVO.



#### "FAIR"

There's tens of thousands of data collections somewhere online, and more should be.

To unlock the treasures hidden there, the data has to be

- ► Findable
- ► **A**ccesible
- ► Interoperable
- ► **R**eusable



#### Standards...

The IVOA constantly develops new standards and evolves existing ones. Some of them are well established and well known like Cone Search, SIA, TAP/ADQL, or SAMP whereas other standards like DataLink or obscore are not so popular (yet). Standards have to be developed though.



## Working Groups and Interest Groups

There are a lot of working groups within the IVOA and for newcomers it might be a bit overwhelming to get the overview. Some titles are selfexplaining, for others an introduction may be necessary. If you are new to the IVOA, these are most likely groups and sessions you will get in contact in the next days:

The Working Groups are: Applications, Data Access Layer, Data Model, Grid and Web Services, Resource Registry, and Semantics.

The Interest Groups are: Data Curation and Presevation, Education, Knowledge Discovery, Operations, Radio Astropostolar System, Theory, and Time Domain.

### Other groups and Committees

- IVOA Executive
- IVOA Technical Coordination Group
- ► IVOA Standing Committee on Science Priorities
- Standing Committee on Standards and Processes



### Demo time

Let' see how all this works together.



### All at one glance:

Users Computers



