

Migale

Virtual Instrument to study the evolution of galaxies

A collaboration between:

- Observatoire de Paris - GEPI
- Observatoire de Lyon
- Moscow State University - SAI
- Sofia University

<http://leda.univ-lyon1.fr>

<http://alcor.sao.ru/db/aspid>

<http://giraffe-archive.obspm.fr>

<http://www.sai.msu.su/migale>



MIGALE



- Develop tools (s/w, databases) to study the evolution of galaxies
 - Mostly (but not only) spectroscopy (gas/stellar populations) - 3D
- Support/distribute the science in our laboratories
- Supported by PNG



MIGALE



- Support the project in our laboratories
 - How? Share developments
 - Why? Avoid duplication of efforts
- Data & services for a broad community (PNG)
 - Reference data
 - Archives with added value
 - Scientific services
- Structure of MIGALE
 - Series of scientific projects
 - Common s/w structure
 - Development team



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- Projects presently supported
 - DISGAL: Evolution of distant galaxies (Hector Florès, GEPI)
 - SPIKER: Stellar populations in galaxies (Igor Chilingarian, CRAL)
 - HyperLeda: reference data (Ph. Prugniel, CRAL)
 - Giraffe Archive (F. Royer, CRAL)
 - ASPID (I. Chilingarian, MSU/SAO)
- Software package
 - Pleinpot (Françoise Tajahmady, GEPI)



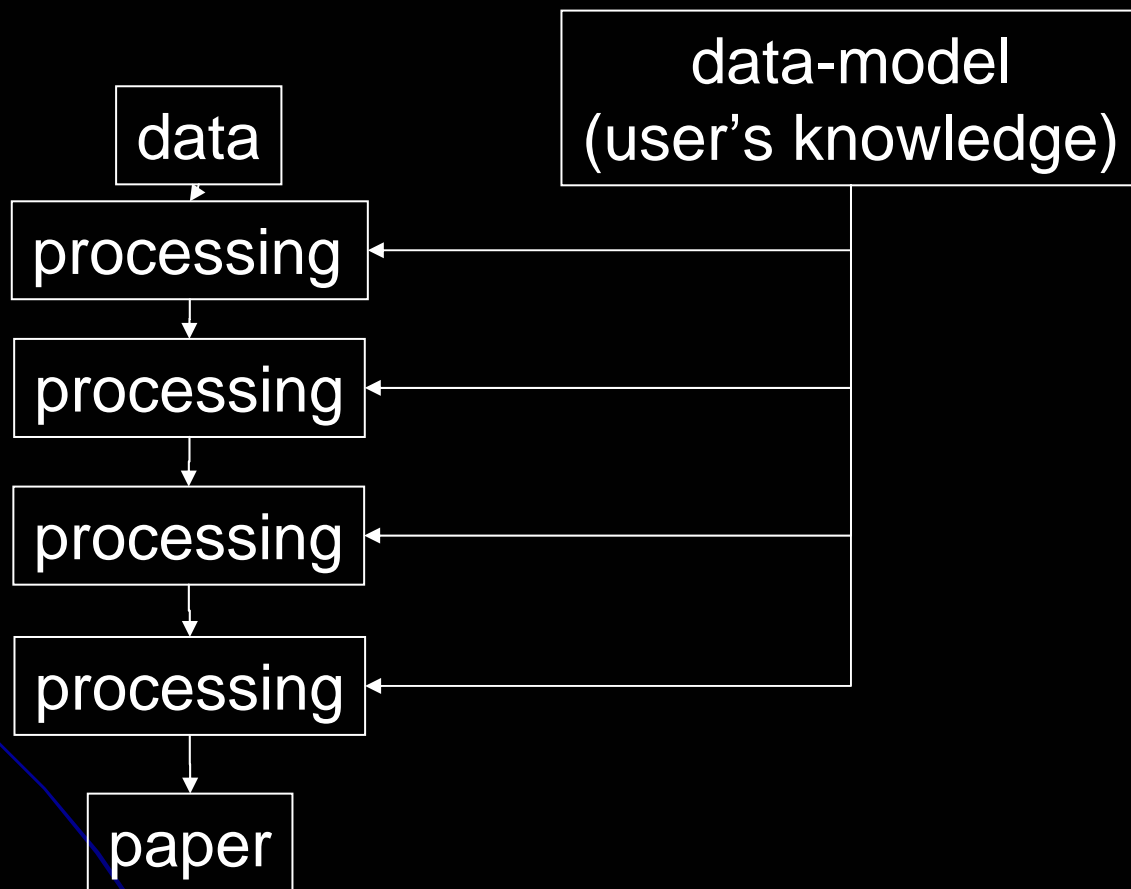
MIGALE



- Why VIRTUAL INSTRUMENT?
 - Use VO (or VO+) data-model internally (take advantage of VO standards within our own tools)
 - Create VO services available for a large community

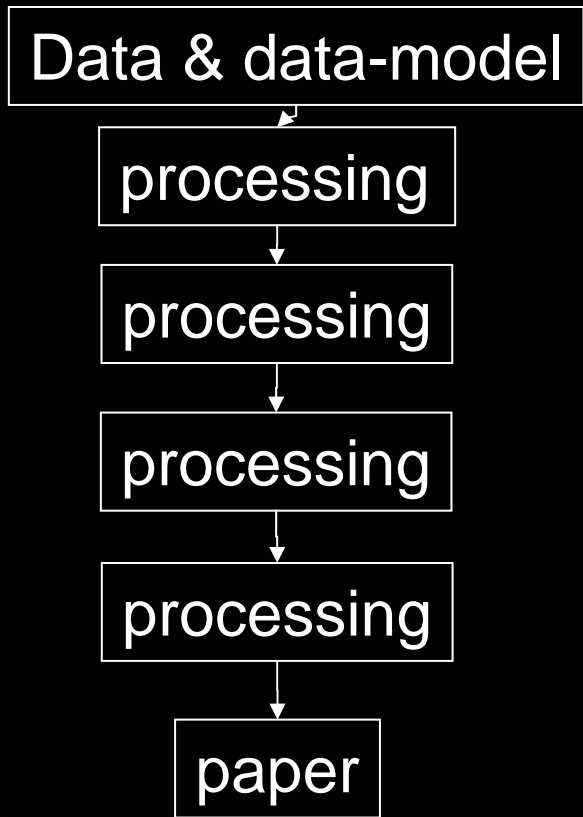


Data2paper v0





Data2paper v1





Data2paper v1



Why Virtual Instrument?

Example: Prugniel, Maubon & Simien 2000.

ReadMe...

The extraction can be re-done customizing some parameters by using a mirror of Hypercat: for example the extraction of L93021HP1_00164.fits may be obtained by downloading the URL:

```
http://www-obs.univ-lyon1.fr/hypercat/fG.cgi?n=11&c=i&o=L93021HP1/00164&
z=ffc|spk[2.2,3,2]|wrs|sks|xto[n,2.4]|prj[a,1]|fca|msk[w5575,n1,w5582,n1]& a=mime:application/x-
fits
```




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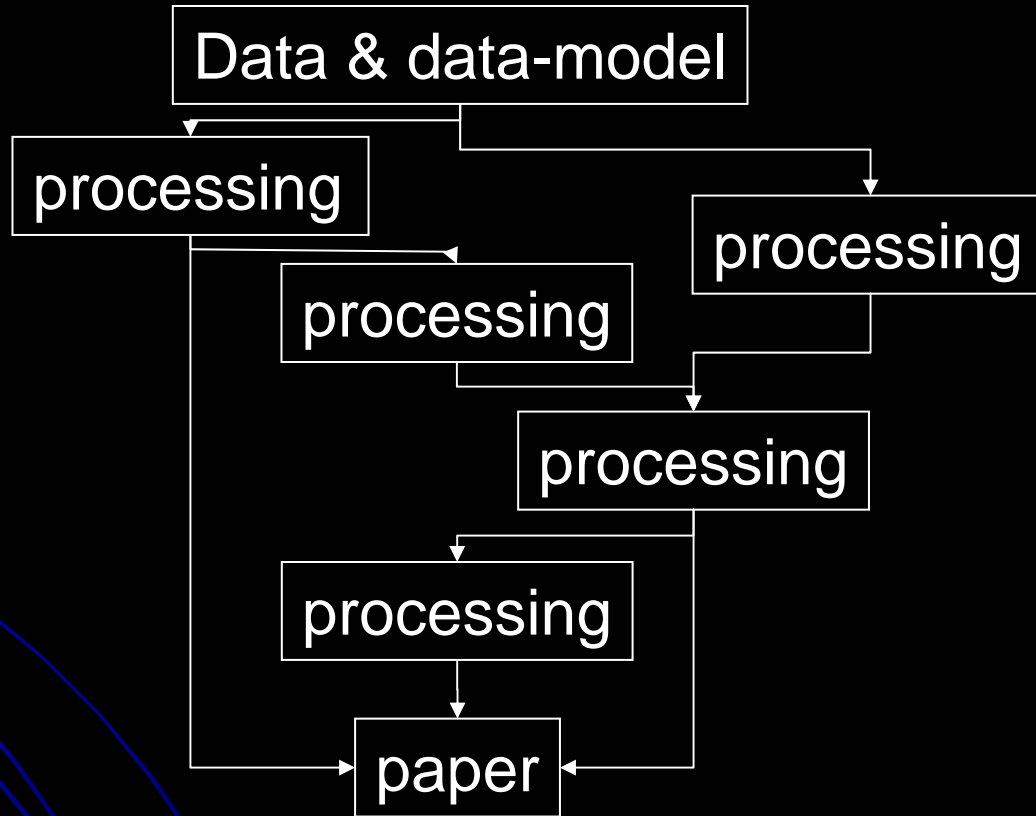


Why VIRTUAL INSTRUMENT?

- On-the fly processing
- Modular architecture: processing/analysing elementary bricks of self-interest

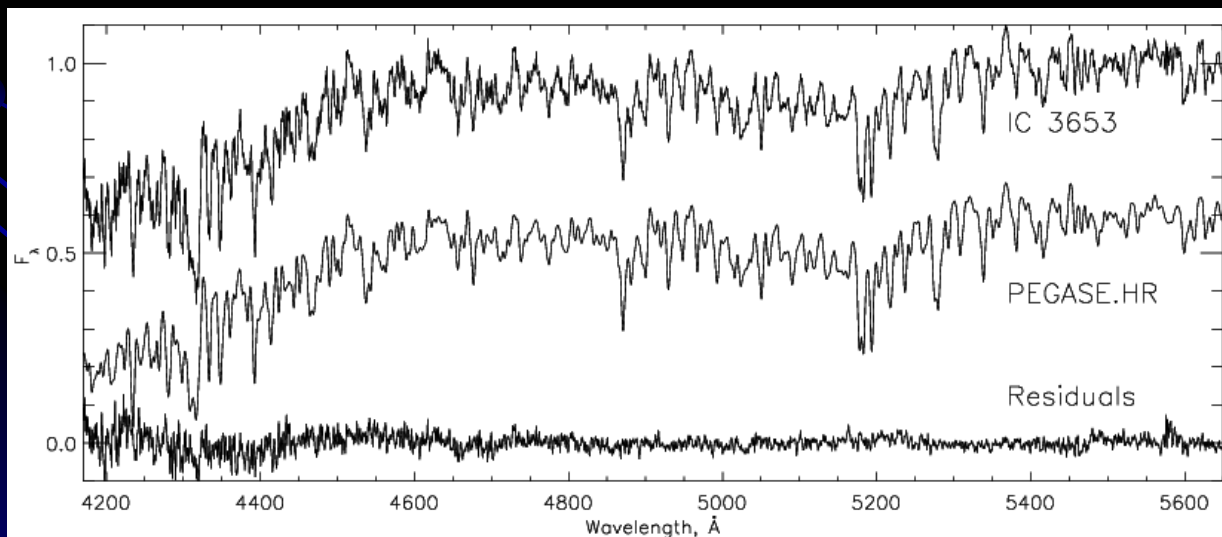
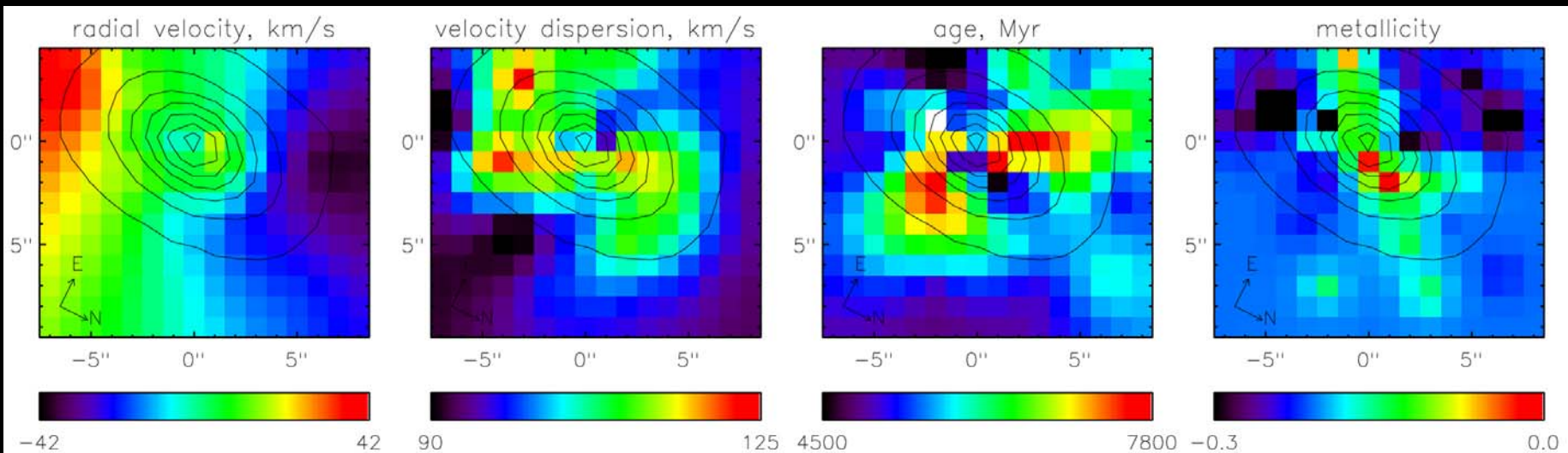


Data2paper v1



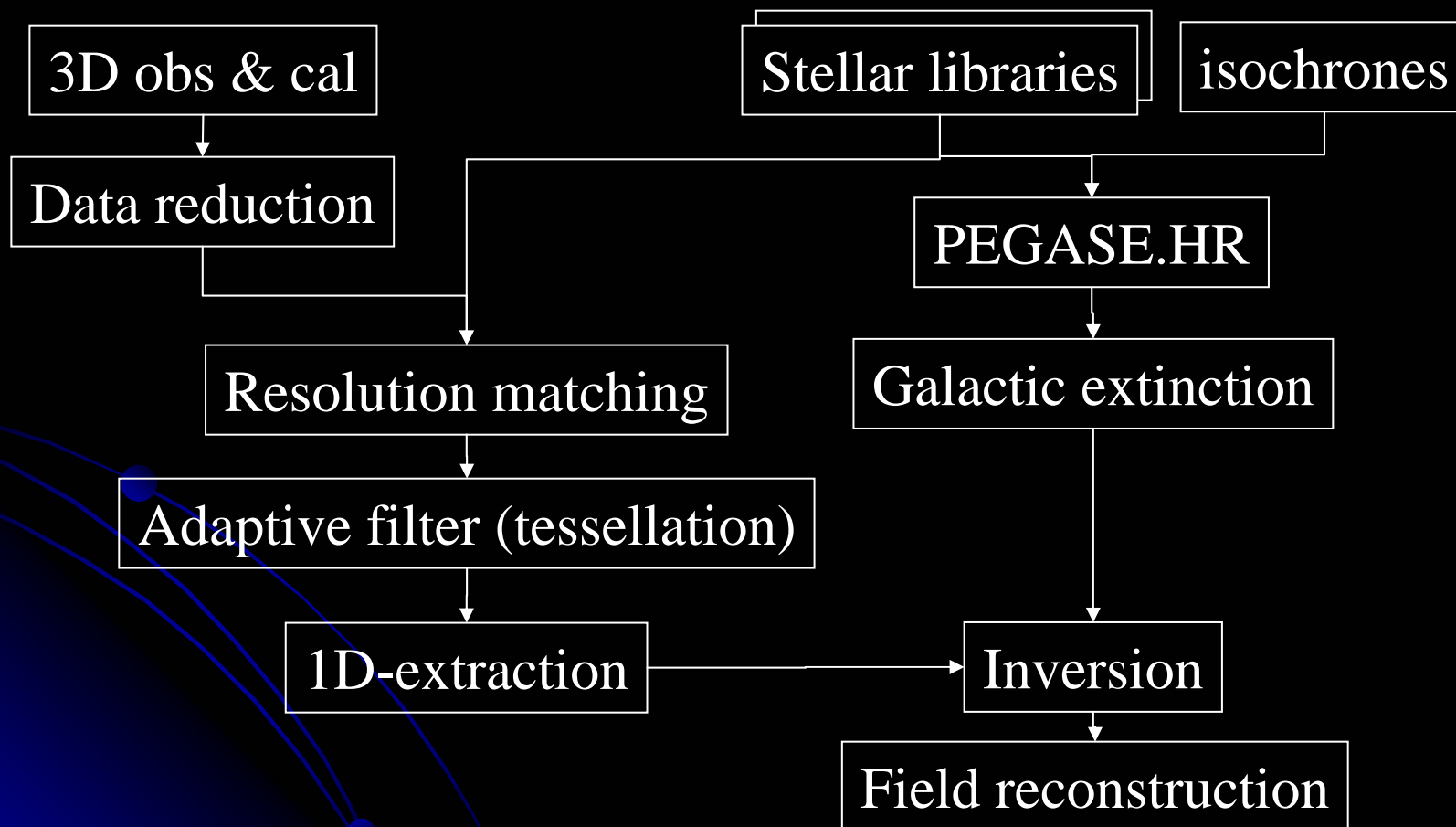


SPIKER





SPIKER





MIGALE: actions



- Integrate algorithms and databases in VO
- Acquire expertise in VO technologies
 - Collaboration with VO-Paris
- Improve the VO standards
 - Science driven use case, when we use them we discover the limits of the DM; we can propose evolution



MIGALE



- Use VO data-model as internal model for the whole development
 - Easy implementation of VO services
 - Distribute an open-source package: Pleinpot
- Participate to discussions & improvements on VO standards
- Support the scientific projects in the laboratories
- Serve the whole extragalactic community