

# WP4 Input

# WP4 Input: Research Initiative

- Submitted proposals and meeting with PIs:
  - ✓ querying by list of objects
  - ✓ VO access to raw data (large archival projects)
  - ✓ time series handling
- Currently supported projects:
  - ✓ *Spectral energy distributions of 2XMM-selected AGN; VOSED* adaptations performed: querying by list of objects, access to additional photometric catalogues, magnitude-to-flux conversion, data visualization
  - ✓ *Is a galaxy's disk scale-length universal?* More flexibility was needed than provided by VO services in terms of image access and cut-outs
  - ✓ *AGN feedback and quenching of star formation;* request made to Aladin team to improve scripting when querying by lists

# WP4 Input: Community Workshop

- Basic VO need: easy access to all available data at all wavelengths in calibrated format!
- Still work to do:
  - ✓ access so far only “simple” (somewhat hard to pre-select); relevant meta-data not always searchable: e.g., exposure time for spectral tools, observing date [mostly *VO problem*, although meta-data need to be there]
  - ✓ still very few “science-ready” data [*data providers’ problem*]
  - ✓ yet, minimal raw data access (needed, e.g., for large [re-]processing/archival projects) [*data providers’ problem*]
- Message from multi-wavelength astronomers: more data in the VO!
- Future is promising: ASTRONET Roadmap report

# WP4 Input: Community Workshop

VO tools problems/still missing things:

- ✓ too many/too complicated VO tools
- ✓ VO searches for lists of sources, massive scaling: scripting for, e.g, cutout services or access to thousand of spectra at the same time
- ✓ “quick” check on **all** available data (raw data access!)
- ✓ standard for filter/response curve + zero point: magnitude to flux conversion  $\Rightarrow$  vital for Spectral Energy Distribution (SED) building!
- ✓ SED “on-the-fly” from spectra and catalogues (at least!)
- ✓ Table Access Protocol
- ✓ top level “VO portal”

# WP4 Input: Community Workshop

- Data coverage: was a position ever observed and, if so, is there a detection or not?
  - ✓ catalogue available: easy
  - ✓ reduced data available: difficult (on-the-fly Sextracton?)
  - ✓ raw data: extremely hard [impossible?] (on-the-fly reduction first!)
- Quantitative quality information: distinction needed
  - ✓ metadata quality: VO should check that relevant information is provided and *make an effort* to check that it is correct
  - ✓ data quality: data providers' task!

# Input to WP4

- WP7: Source Data Model
- ...

# VO School the week of March 30

- Please make sure all services are up and running and that all interoperability features are working!