

# ESO: FROM A USER'S PERSPECTIVE

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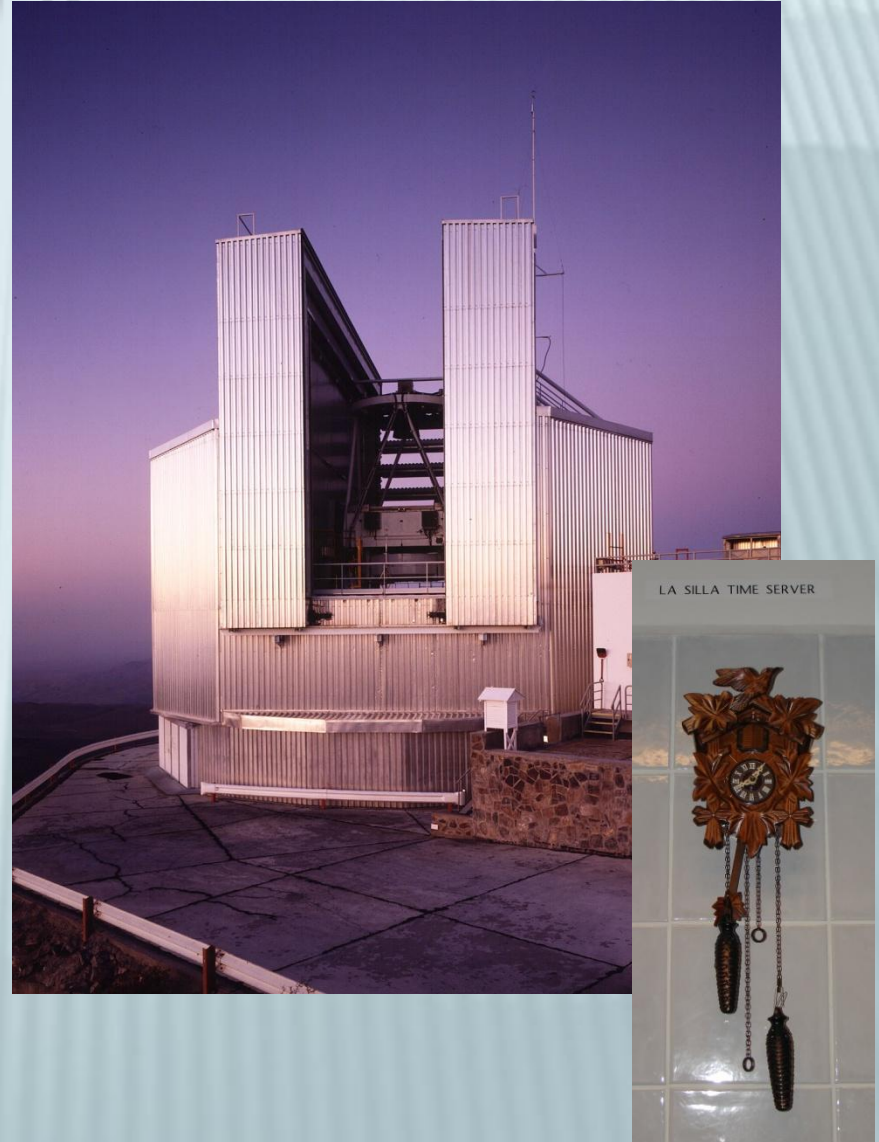
# OVERVIEW

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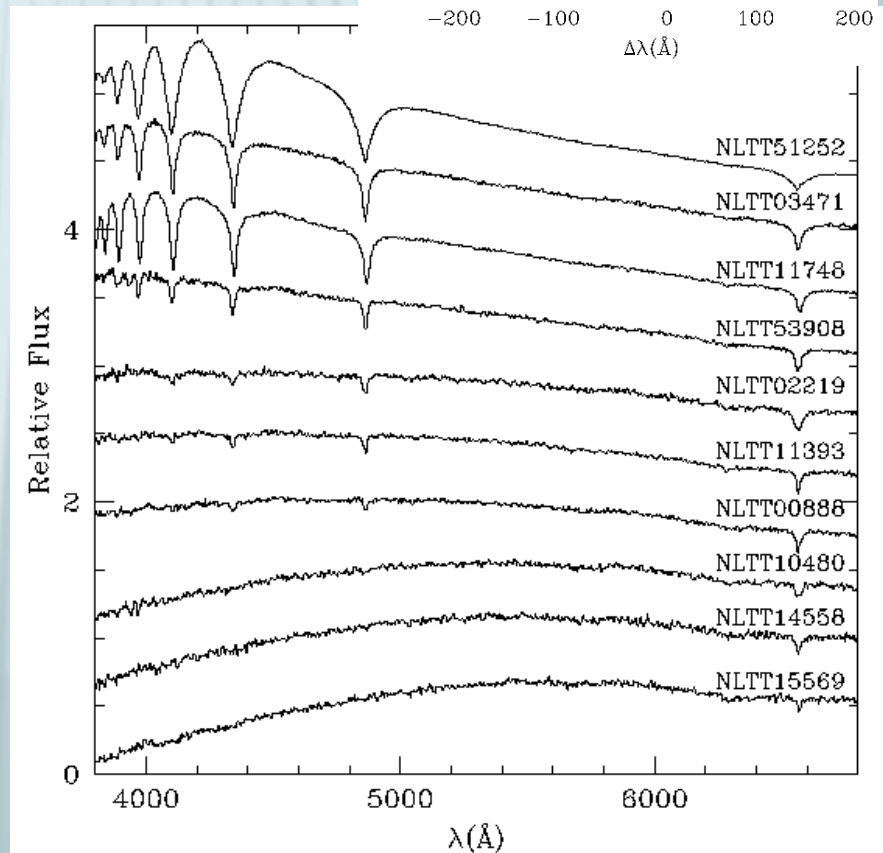
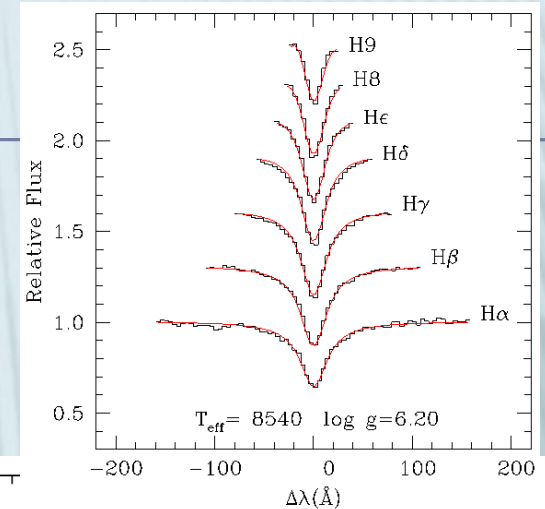
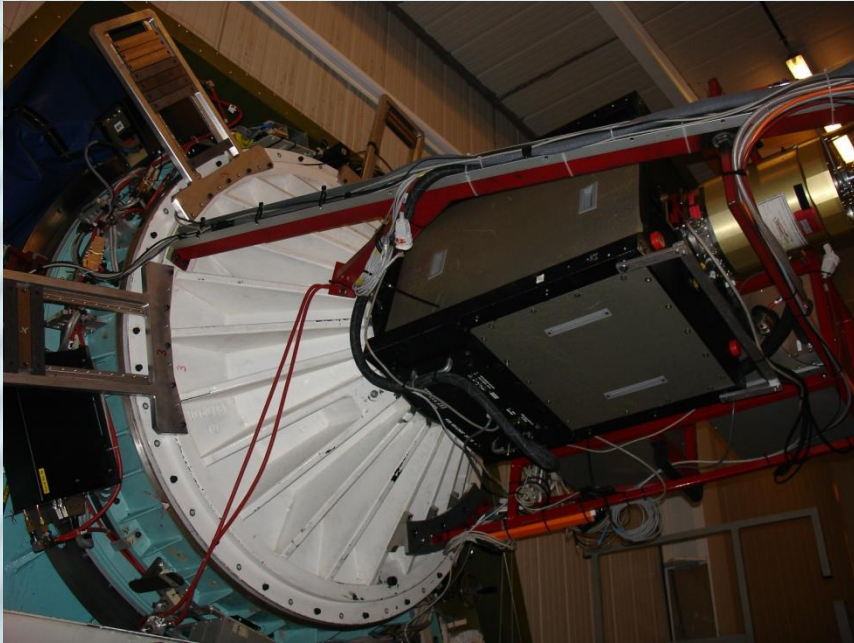
- Observing experience using ESO
  - Visiting astronomer at La Silla
  - Service mode observations with the VLTs
- Committees of ESO
- Users Committee
  - Role of the UC
  - What does the UC do?

# OBSERVING AT LA SILLA

- ESO will arrange your travel
- Prepare your OBs with the P2PP tool
- On the mountain
  - Setup request (e. g., gratings, filters)
  - Transfer your OBs
  - Calibrations
  - Obtain your data!



# OBSERVING AT LA SILLA



- ESO Faint Object Spectrograph
- We identified several new white dwarfs and hot subdwarfs
- Including NLTT11748 – ELM white dwarf (Kawka & Vennes 2009)

# OBSERVING IN SERVICE MODE

The screenshot displays the P2PP 3.4.0 software interface. The main window is titled "Observing Runs" and shows a table of observation runs. The table has columns for Name, Local Id, ESO Id, Status, Target, OD, CS, Acquisition, Finding Charts, and Ephemeris File. The runs are organized into folders: 093.D-0324(B)/SM/XSHOOTER and 093.D-0797(A)/SM/XSHOOTER. The 093.D-0797(A) folder is expanded, showing four runs with details like Local Id (316, 319, 322, 325), ESO Id (10482...), Status (D)efined, Target (NLTT00347, NLTT02219), OD (NLTT00347, NLTT02219), CS (Grey, Dark), and Acquisition (XSHOOTER\_slit...). Below the table, there are tabs for "Obs/Calib Blocks" and "Schedule".

On the left, a panel titled "View Finding Charts" shows a detailed view for observation "NLTT52404\_1". It includes fields for "Obs. Description", "OD Name" (NLTT52404), "User Comments", "Instrument Comments" (im, S/N=70@650nm, S/N=65@1200nm), "Execution Time" (00:59:59.000), and "TemplateType" (acquisition). A list of templates is shown, with "XSHOOTER\_slit\_acq" selected. Below this is a table with columns for "XSHOOTER\_slit\_acq", "1", and "XSHOOTER\_slit\_4". The table lists various parameters and their values, such as "Get Guide Star from" (CATALOGUE), "RA of guide star" (0), "DEC of guide star" (0), "Position Angle on Sky" (9999.0), "Offset RA" (0), "Offset DEC" (0), "Instrument A&G Filter" (V), and "CCD Exposure time" (10). The right side of the panel shows a "View Finding Charts" window with a grayscale image of the star field. The image is labeled "093.D 0797 Kawka NLTT52404 V (EFOCS2)" and includes a scale bar (30") and a north arrow. Below the image, there are zoom controls and a "Scale to fit" option.

- Phase 2 – define your observations with the P2PP tool

# OBSERVING IN SERVICE MODE

- Monitor your observing run via the User Portal

- View the progress of your run
- Subscribe to night reports

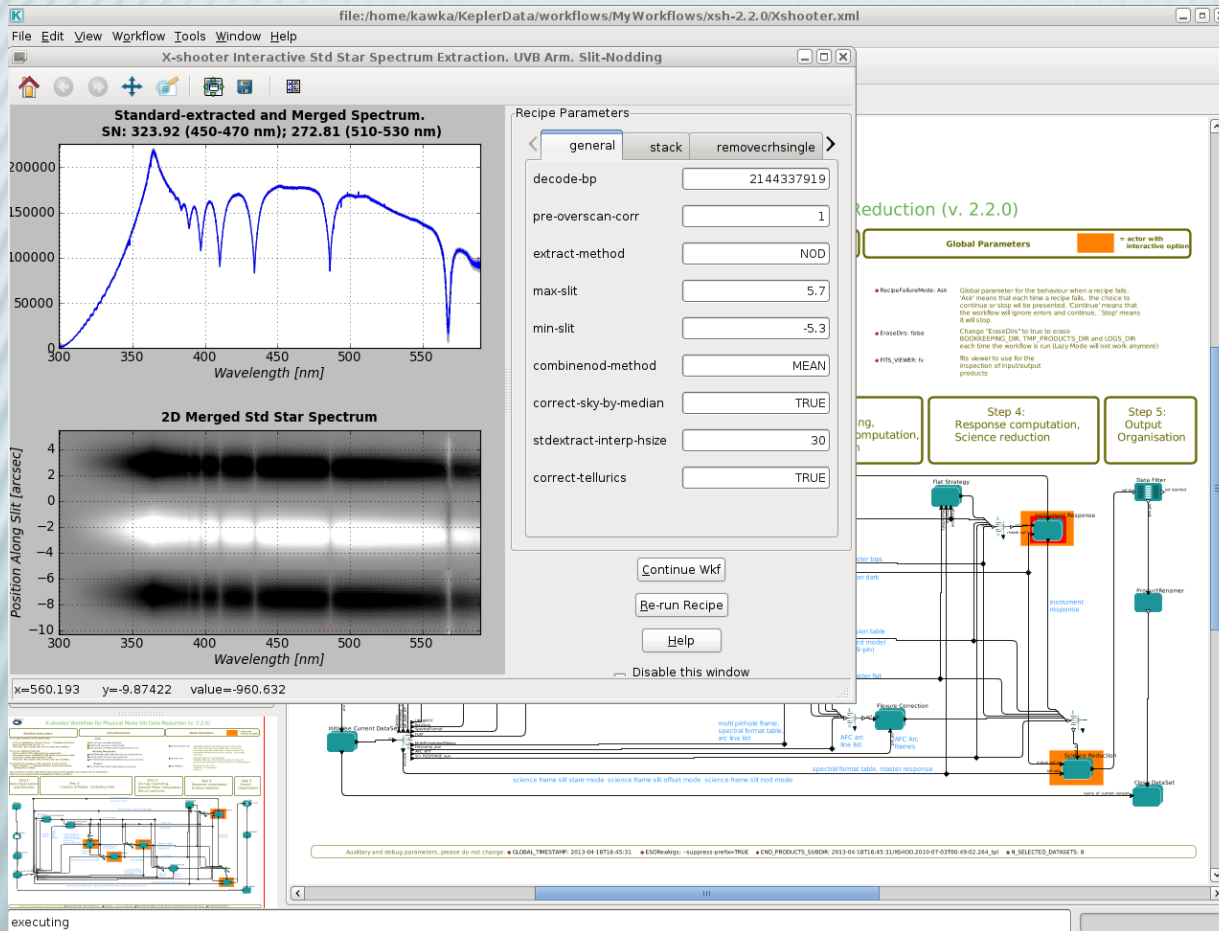
- Retrieve your data from the ESO Archive

- CalSelector will attach the necessary calibration data required for data reduction

The screenshot shows the 'OB Details' page for two observing runs. The first run is on 04 Aug 2013 04:51:50 - 07:49:31. The second run is on 02 Sep 2013 05:14:29 - 04:12:38. Both runs are for instrument XSHOOTER, target ILTT088B\_1 and ILTT088B\_2, and PI Adela Kawka. The weather is 'ACT' and the status is 'Requested'. A table below shows the status of various constraints: Seeing (1.0), Sky Transparency (CLEAR), Airmass (2.8), FLI (9.3), Moon Distance (120), Fringe Quality (1/3), Ellipticity (1/3), and I.Q. variation (1/3).

The screenshot shows the ESO Request Handler interface for request #108019 by Adela Kawka. It displays a list of requested datasets with columns for 'Select', 'Dataset', 'File (Category)', 'Size', and 'Access'. Below this, the ESO Download Manager is shown, displaying a list of files with columns for 'Filename', 'Status', and 'Progress'. The files are being downloaded from the ESO Archive, and the progress bar shows the percentage of the file downloaded.

# DATA REDUCTION

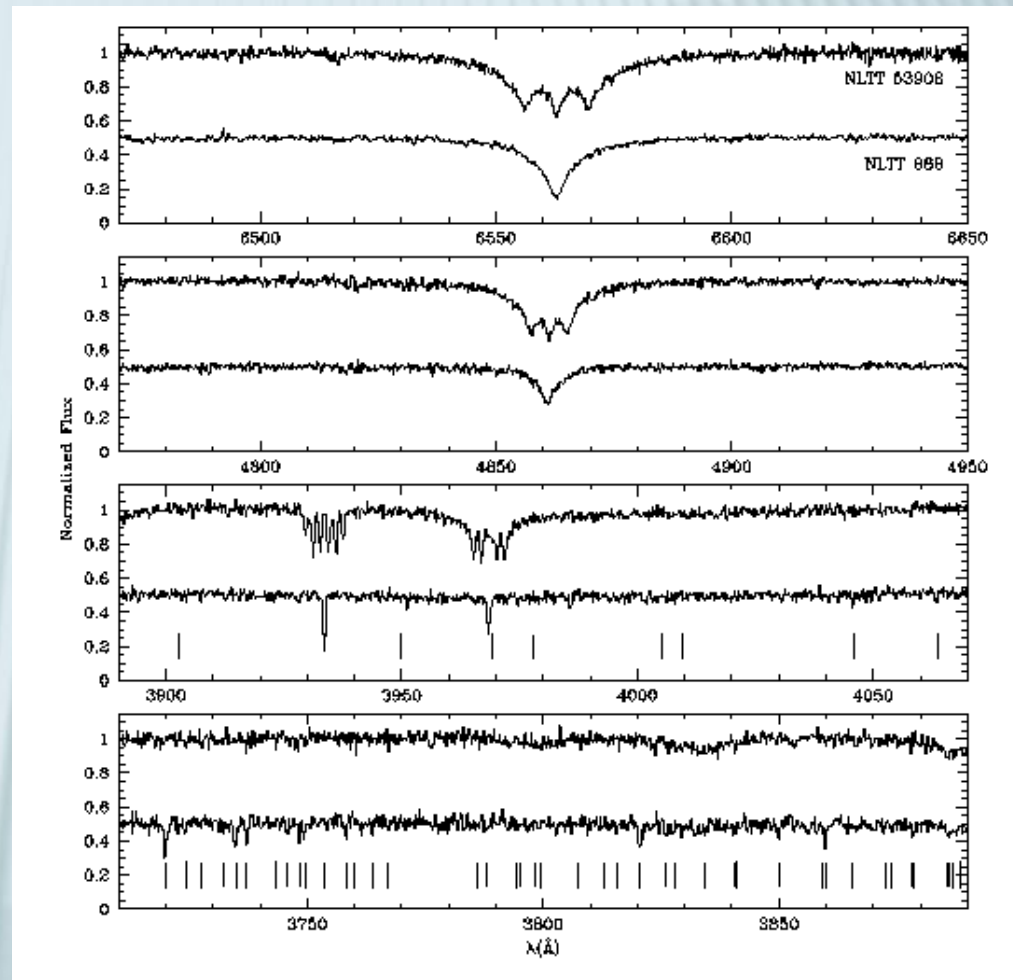


- Automatically organizes your data
- Graphical view of the data reduction steps
- Enables inspection of data
- Enables interaction

- Reflex – provides an interface to reduce data using ESO pipelines

# FINAL PRODUCTS

- We obtained data with:
  - X-shooter – ideal for searching for heavy elements
  - FORS – allows us to obtain spectropolarimetry and search for weak magnetic fields
- X-shooter spectra of two DAZ white dwarfs
  - NLTT53908 is magnetic,  $B_s = 334$  kG (Kawka & Vennes 2014)





# ESO'S GOVERNING BODIES

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- × Council
- × Finance committee
- × Scientific Technical Committee
- × Users Committee
- × Observing Programme Committee

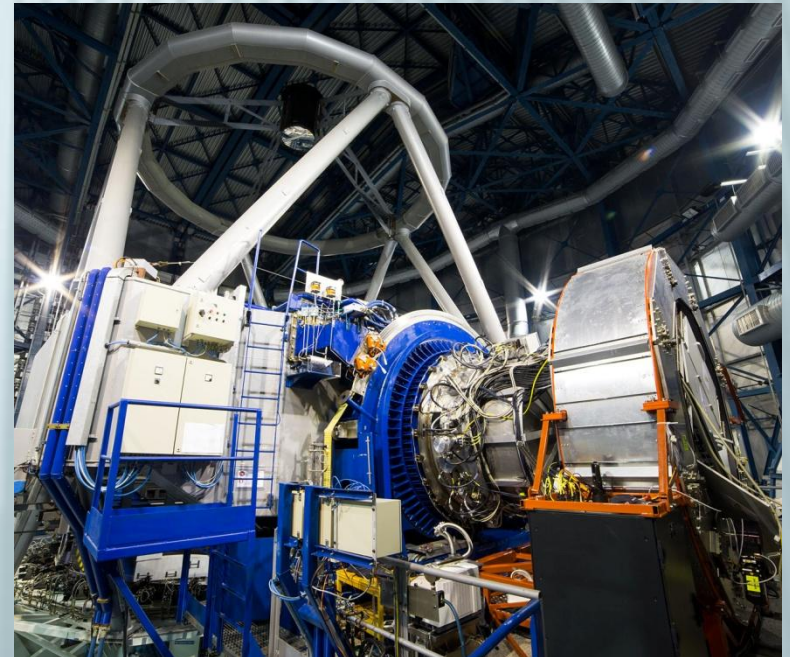
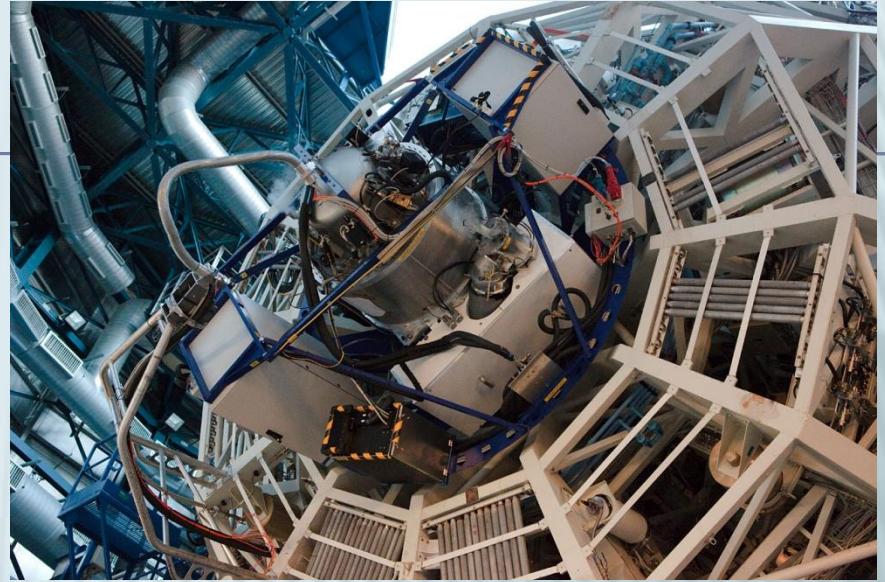
# USERS COMMITTEE

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- Is there to represent the users of ESO.
- Composed of representatives from the ESO member states and Chile
- Every year the UC conducts a poll in order to obtain feedback about
  - Performance of the observatory
  - Scientific access
  - Operations
  - Data management
- Do participate in the Poll

# USERS COMMITTEE

- The UC hears reports from:
  - Update on ESO's programmes
  - The La Silla Paranal Observatory
    - Telescope statistics
    - Changes to instrumentation
    - Future instruments
    - User Support



# USERS COMMITTEE

## Reports about:

- Data transfer
- Data processing
- Science data reduction
- Science Archive Facility
- Raw data
- Reduced data

The screenshot shows the ESO Science Archive Facility website. The top navigation bar includes 'Public', 'Science', 'User Portal', and 'Interact'. The main content area is titled 'Data Portal' and contains a welcome message, a list of 'Latest News and Updates', and a table for browsing the archive. Below this is the 'ESO Archive Query Form' which includes a search bar, a 'Reset' button, and various input fields for target information, scheduling, and instrument selection.

Category	Query Forms	Data collection	Data Type	Instruments
LPO Raw Data	Raw data query form (all instruments) Instrument specific query forms Direct retrieval of raw data by file name	All ESO raw data	Various	Many La Silla Paranal instruments
LPO Data Products	Phase 3 main query form Phase 3 imaging query form Phase 3 spectral query form Phase 3 VIMOS-specific query form	Phase 3 Data Products (ESO public surveys, large programs, pipeline products, etc.)	Currently: Imaging and Spectroscopy	Currently: VISTAIR/CAL, VST/OmegacAM, VES pipeline products, etc.
Catalogue Facility query interface	Phase 3 Catalogues (ESO User Portal authentication required also when browsing)	GOODS (C. Cesari et al.) iCOSMOS (S. Lilly)	Catalogues Imaging, Spectroscopy	Currently: VISTAIR/CAL, FEROS FOR2/ISAAC/VIMOS
Advanced Data Products query form	Observation of Core astrometrically-selected HD stars (E. Poretti)	Spectroscopy (time series)	FEROS	FEROS

This is a detailed view of the ESO Archive Query Form. It features a search bar with a 'Search' button and a 'Reset' button. Below the search bar are several sections for inputting query parameters:

- Target, Program and Scheduling Information:** Includes fields for Target Name, RA, DEC, Search Box, Input, Output, and List of Targets. It also has checkboxes for Night, Start, End, Program ID, PI Cel, SY, and Tide.
- Observing Information:** A grid of checkboxes for selecting instruments across different categories: Imaging, Spectroscopy, Interferometry, Other, and Polarimetry.
- Data Product Info:** Fields for Type, Mode, Dataset ID, Orig Name, Release Date, OR Name, and OR ID.
- Instrumental Setup:** A section for selecting specific instruments like SCIENCE, CALIB, and ACQUISITION.

# USERS COMMITTEE

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- Report from the Observing Programmes Office
  - Statistics on submitted proposals
  - Recent changes and development with regard to preparing, submitting or evaluating proposals

# USERS COMMITTEE

- Special Topic session – this year if was ESO's Observing Tools
  - P2PP tool – including the new features such as scheduling containers
  - Finding chart tools
  - Exposure time calculators

# USERS COMMITTEE

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- The UC compiles a list of recommendations to ESO
  - Which is based on the users' input
- The UC representative should report back to the community about ESO's operations
  - Releasing the minutes (once they have been approved)
  - Providing a short report
- UC was established to represent the users of ESO.