



ESO and its Office for Science in Chile

...VLT(I), ELT, ...'Expanding Horizons'... Fellowships, Studentships, Internships...

Joe Anderson, ESO, Head of the Office for Science in Chile
UK National Astronomy Meeting, 2025



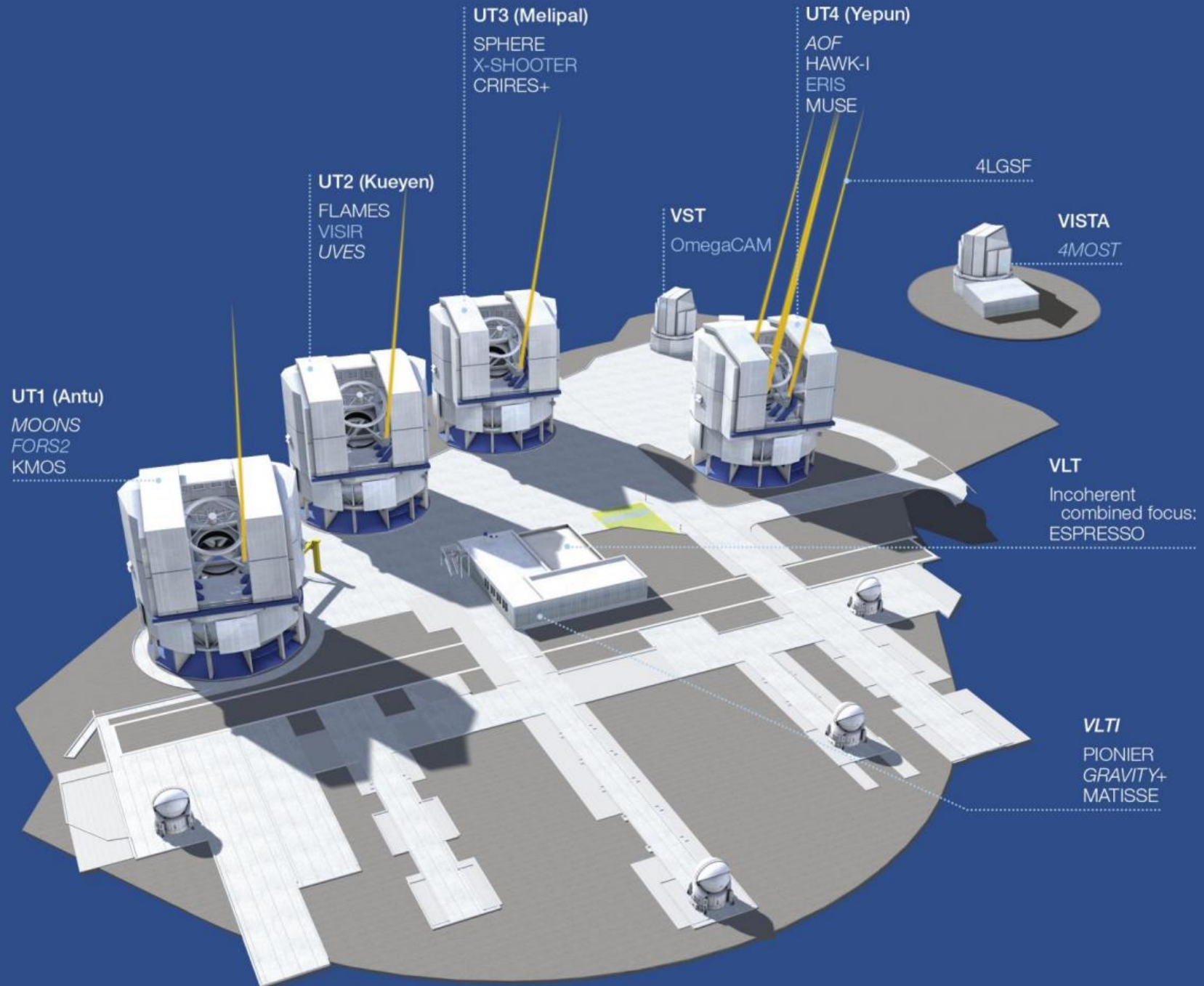
ESO: current and future facilities

Largest ground-based observatory in the world...

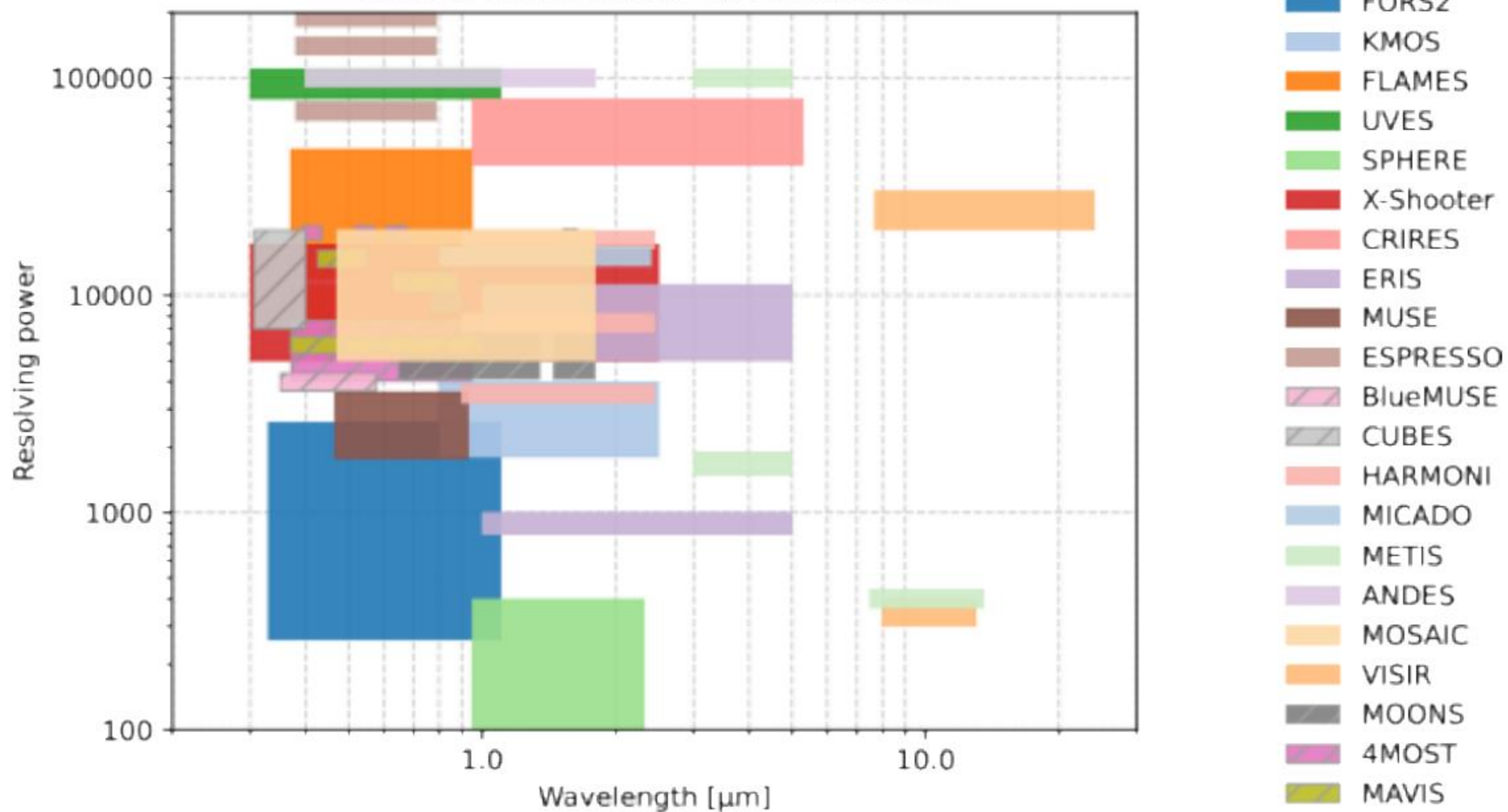
Current facilities:

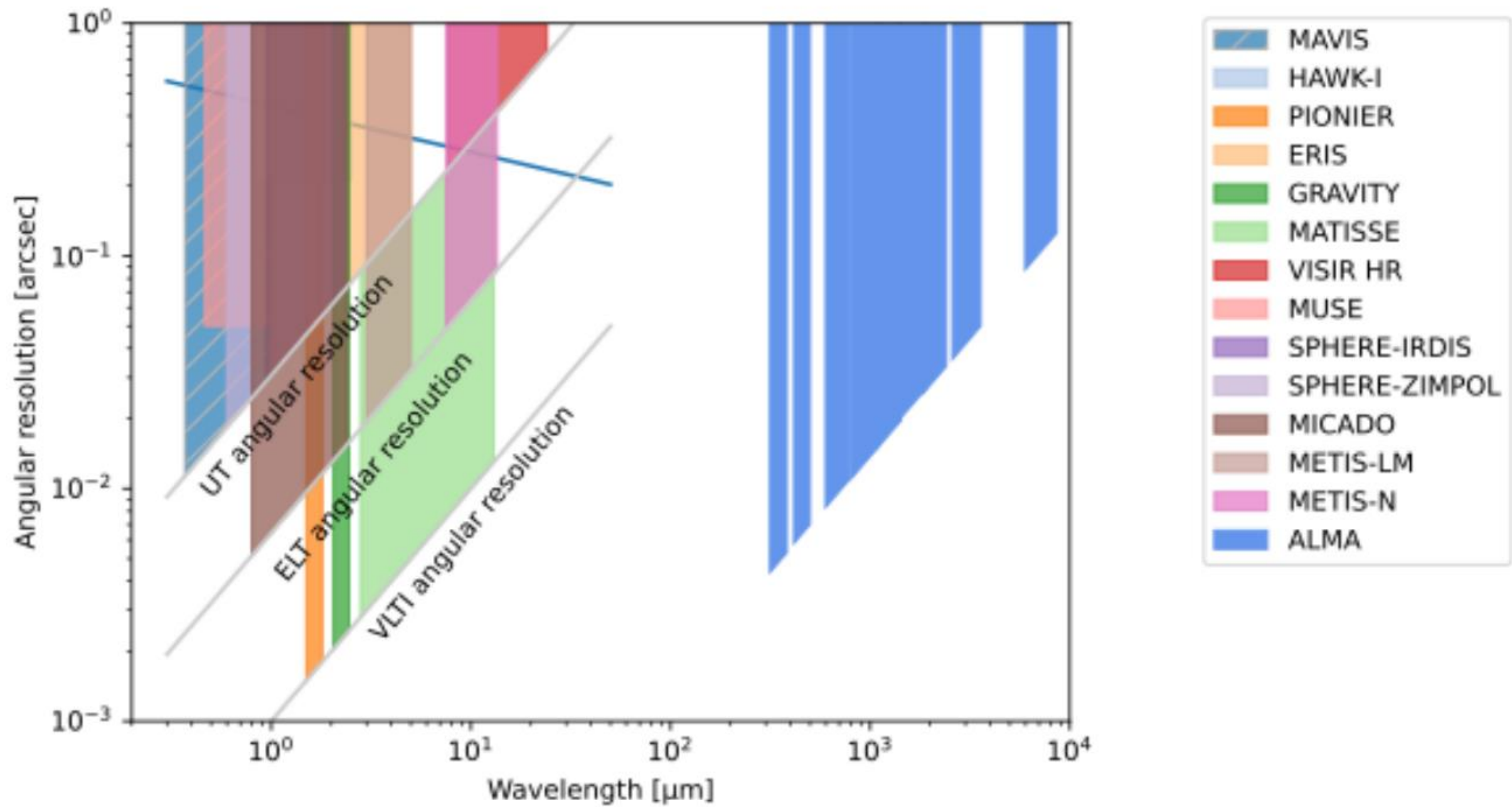
- **NIRPS/HARPS and SOXS @La Silla (4m class) – optical/IR**
 - Consortium led exoplanet and transient facilities
- **Very Large Telescope (VLT) @Paranal – optical/IR**
 - 4x8m VLTs/UTs (12+1 instruments) + AOF
 - VISTA 4m+4MOST
- **VLTI @Paranal – IR interferometry**
 - 4xUTs or 4xATs (1.8m)
- **ALMA @Chajnantor – mm/sub-mm interferometry (up to 16km)**
 - Wideband Sensitivity Upgrade (WSU) ongoing...





Paranal+Armazones instrumentation





ESO: current and future facilities



Largest ground-based observatory in the world...

Future instruments @La Silla Paranal Observatory:

- **SOXS @La Silla**
- **Very Large Telescope (VLT/I) @Paranal – optical/IR**
 - Instruments almost there: MOONS; 4MOST; GRAVITY+
 - Instruments past FDR: FORS-upgrade
 - Instruments towards FDR: CUBES; MAVIS
 - Instruments at Phase A: 2GDSM; BlueMUSE
- **Planned workshop in 2026 to assess the VLT(I) in the 2030s and beyond**



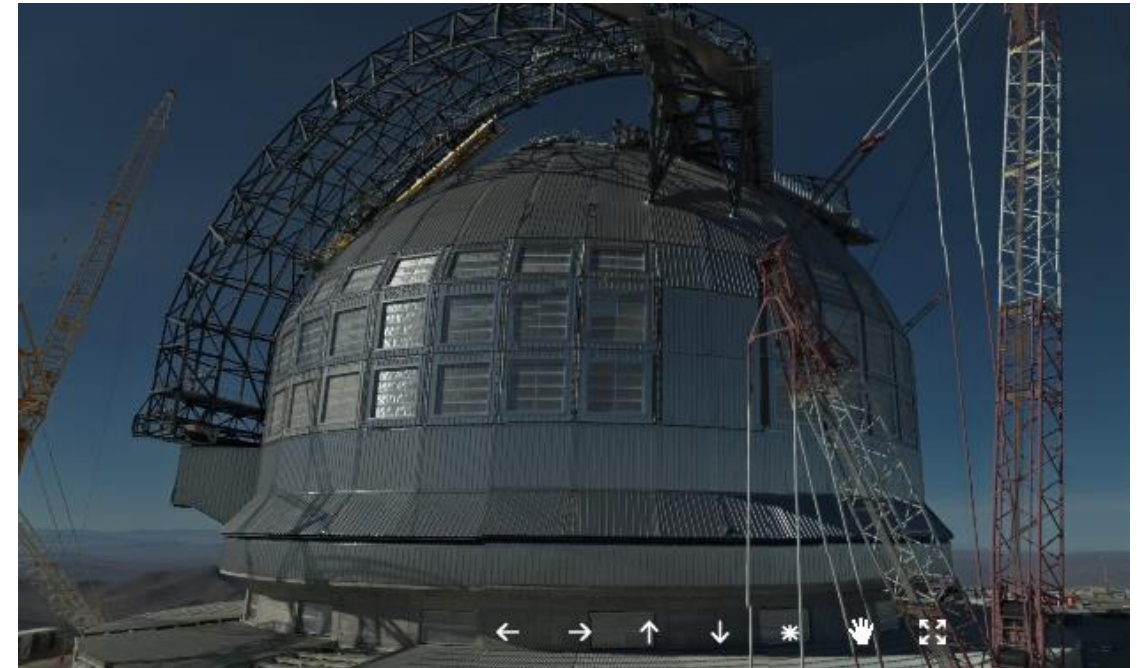
ESO: current and future facilities



Largest ground-based observatory in the world...

The ELT (39m AO telescope):

- **Current schedule:**
 - 2029 'Telescope first light'
 - 2030 'Scientific first light'
- **First light instruments:**
 - **METIS** – midIR imager and spectrometer
 - **MICADO** – nearIR imager and spectrometer
 - Later: MORFEO (AO module), HARMONI (IFU)
- **Second generation instruments:**
 - **ANDES** – high-resolution spectrometer
 - **MOSAIC** – visible-nearIR multi-object spectrometer



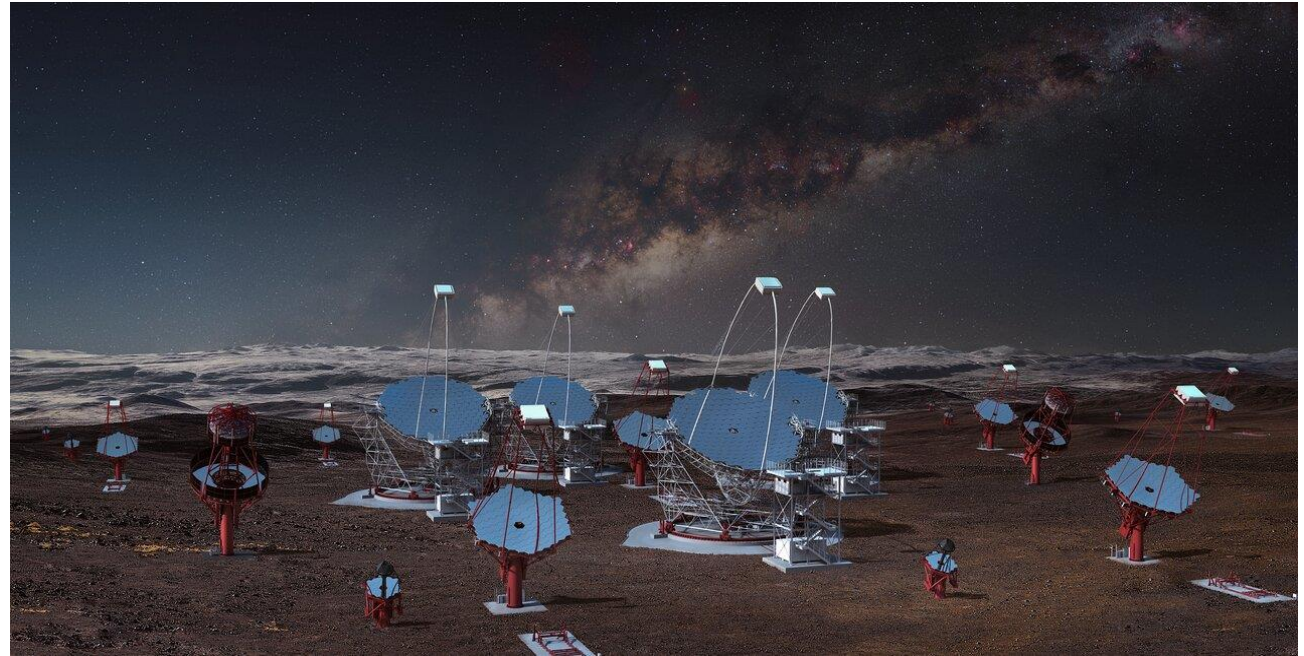
See ELT webcam: <https://elt.eso.org/about/webcams/>

ESO: current and future facilities

Largest ground-based observatory in the world...

Cherenkov Telescope Array Observatory (CTAO):

- Gamma-Ray observatory to be installed close to Paranal (together with Northern counterpart in La Palma)
- 51 telescopes planned at CTAO-South
- Most powerful ground-based observatory for very high-energy gamma-ray astronomy
- ESO is a founding member of the CTAO Council, with Chile as a member of the CTAO consortium



ESO: current and future facilities

Largest ground-based observatory in the world...

ESO into the 2040s... 'Expanding Horizons'



ESO: opportunities for collaboration at ESO Chile

The Office for Science in Chile



The Office for Science in Chile coordinates all scientific activities and programmes within ESO Chile:

- Staff astronomer research (~45 ESO staff astronomers)
- Fellowship programme (23 fellows at ESO and ALMA)
- Studentship programme (11 PhD positions, plus externally funded)
- Internship programme (Masters level and below)
- Visiting scientist programmes (specific early-career and senior scientist programmes)
- La Silla School, for training the next generation of students in telescope, instrument, academic techniques
- ESO workshops (+ 'mini workshops')



ESO: opportunities for collaboration at ESO Chile

The ESO-Chile fellowship

The ESO-Chile fellowship offers a unique opportunity to develop independent research projects at an active campus (ESO Vitacura) while obtaining first-hand observatory experience (LPO, OSF), and interacting with telescope/instrument expert astronomers and engineers...

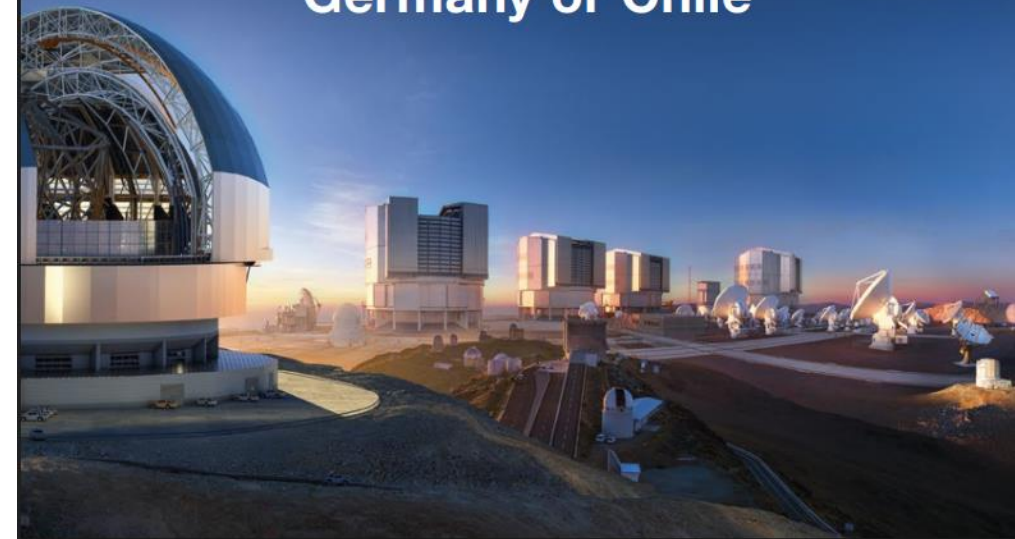
Important information:

- ~3-6 positions open each year (a total of 23 fellowships)
- Deadline of ~15th of October each year
- **Four-year fellowships:**
 - First three years with 50% observatory duties
 - 4th year can be spent at an institute at an ESO member state, Strategic partner, or host (Chile), without any observatory duties



Reach New Heights

Fellowships in Germany or Chile



ESO: opportunities for collaboration at ESO Chile

The ESO-Chile fellowship

- **50% working on observatory duties at Paranal or ALMA, e.g.:**
 - Support astronomer/Astronomer on duty
 - Instrument fellow, operations team
 - Data processing, software testing...
- **Well supported fellowship:**
 - Significant FTE for assistance and mentoring
 - Significant travel funds
 - Possibility to co-supervise students
 - Possibility to organise workshops



Here you can find all the information related to the ESO Fellowship Programme and the recruitment process.

The application deadline is every year on 15 October.

If you are interested in applying for the ESO Fellowship in Germany or Chile, please read carefully the [instructions for applicants](#).

For a general overview of the ESO Fellowship Programme please download the [ESO Fellowship brochure](#) and click on the topics below for further details.

What makes it unique	Mission and Vision	How we support you
Duration and Frame of the Programme	Fellows' Research	Fellows and ESO Projects
Development Programme	Recruitment Process	Remuneration and Benefits

Also available is our [FAQ](#) page. Please send any question/request using one of the emails available on the [contact](#) page.

ESO: opportunities for collaboration at ESO Chile

The ESO-Chile studentship

The ESO-Chile studentship receives PhD students enrolled in a PhD programme at institutes from around the world. Students come to ESO to work on a specific research project with an ESO supervisor (staff and/or fellow), with significant opportunities to work on observatory projects/learn about observatory operations/life...

Important information:

- Call for applications twice per year (April and October)
- ~4-6 positions open at each call (11 positions in total)
- Studentships can be between six months to two years
- Students are expected to work on short observatory projects (one-two weeks)



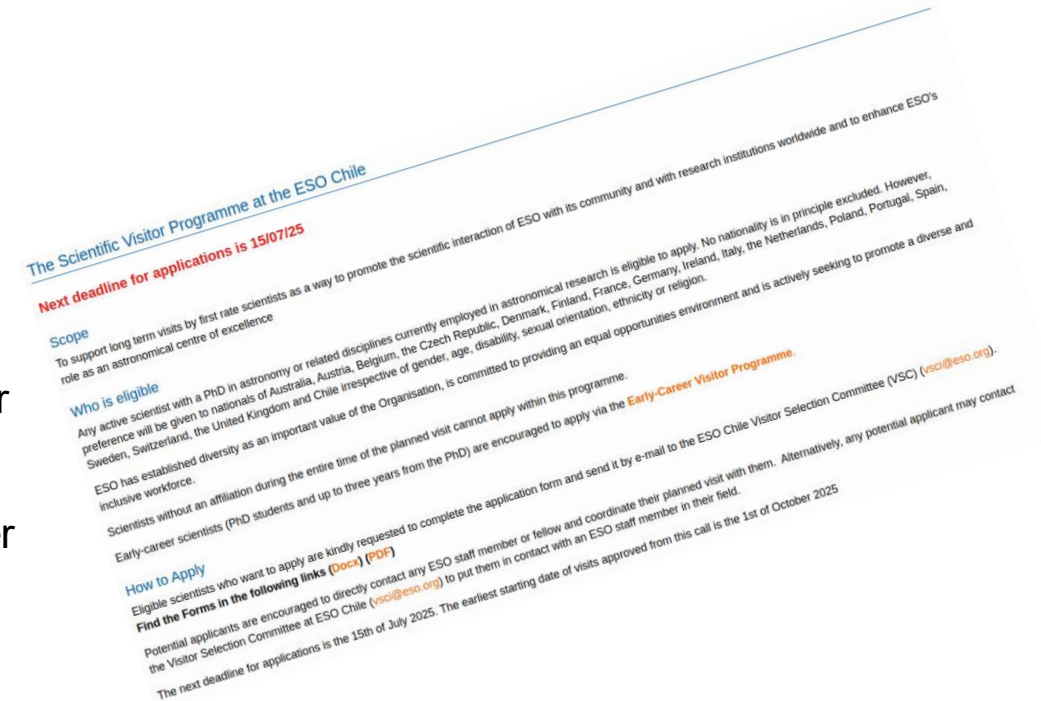
ESO: opportunities for collaboration at ESO Chile

Visiting scientist programmes

The scientific visitor programme in Chile supports long-term (and shorter term) visitors to collaborate with ESO-Chile astronomers and contribute to scientific life at ESO Vitacura.

Important information:

- Previous rolling call... Being changed to calls for visitors every four months
- Applications separated into 'Visitor programme' and 'Early career visitor programme'
 - <https://www.eso.org/sci/activities/santiago/personnel/visitors.html>
- A 'senior scientist' programme also exists...
- We also receive professors on sabbatical...



Thank you!

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