Communicating a big science project

— The case of the European Southern Observatory

Lars Lindberg Christensen, Head of ESO Outreach


Glacier Helicopters

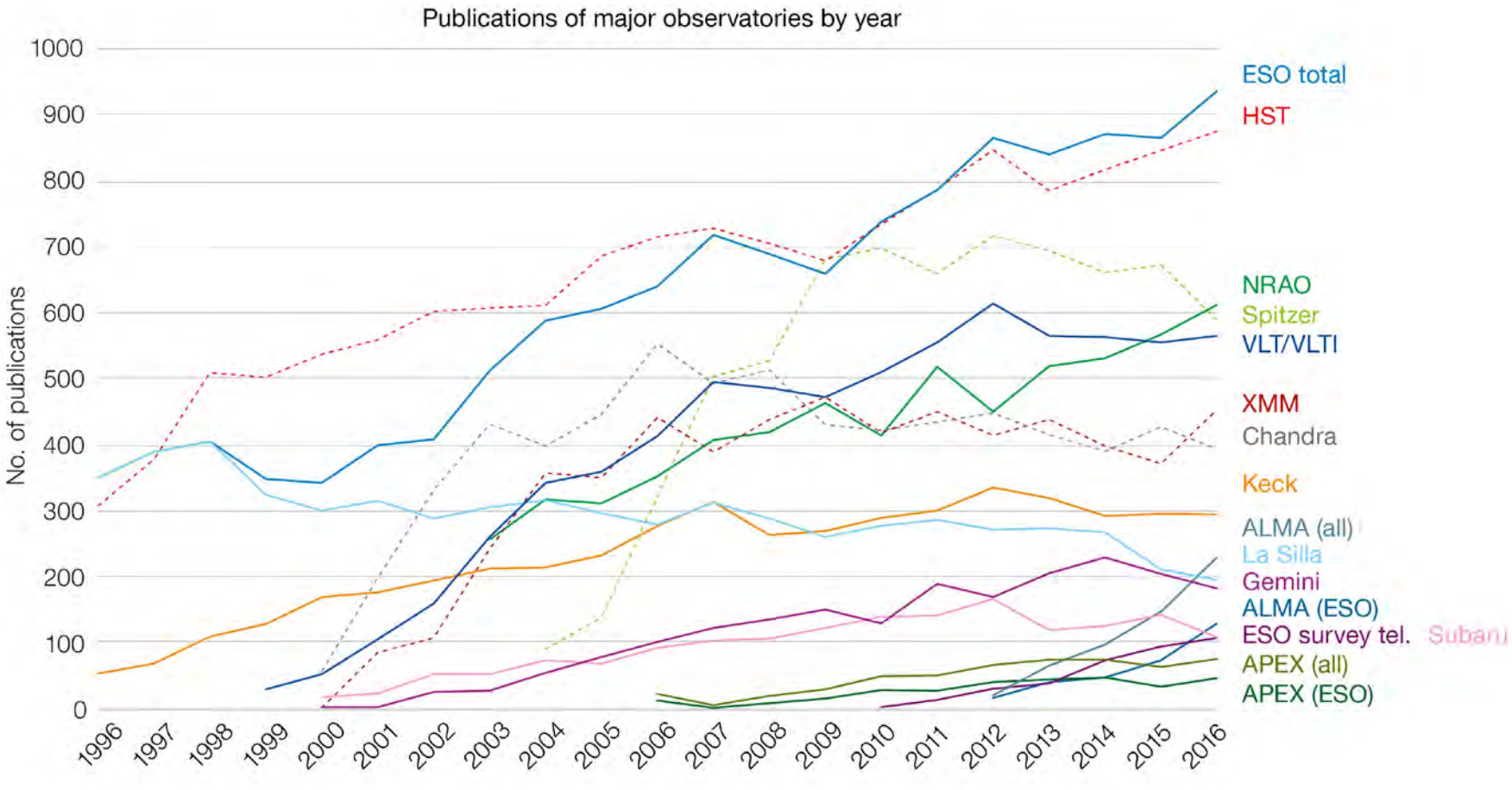
ESO, the European Southern Observatory, is the world-leading ground-based astronomy organisation in the world.

ESO provides state-of-the-art telescope facilities to astronomers.

ESO is an intergovernmental organisation (IGO) supported by 17 countries: Austria, Australia, Belgium, Brazil, the Czech Republic, Denmark, France, Finland, Germany, Italy, the Netherlands, Poland, Portugal, Spain, Sweden, Switzerland and the United Kingdom, along with the host state of Chile.

The annual Member State contributions to ESO are approximately 150 million euros, or 0.20 euros per person in Europe per year.


By building a platform together, Europe makes it possible to do mega science projects in astronomy.



Since 1996, ESO has been the most productive ground-based observatory in the world — and most of the time, even more productive than Hubble.

ESO operates three unique observing sites in Chile: Paranal, La Silla and Chajnantor and has its Headquarters in Garching bei Munchen, Germany.

Why Chile?


The BEST atmospheric conditions
Over 300 clear nights per year
Political and economical stability
Free from radio interference and light pollution!
Milky Way view is spectacular
ESO

Where are our Observatories?

La Silla

ESO’s first observatory site


La Silla became the largest astronomical observatory of its time, leading Europe to the frontline of astronomical research.

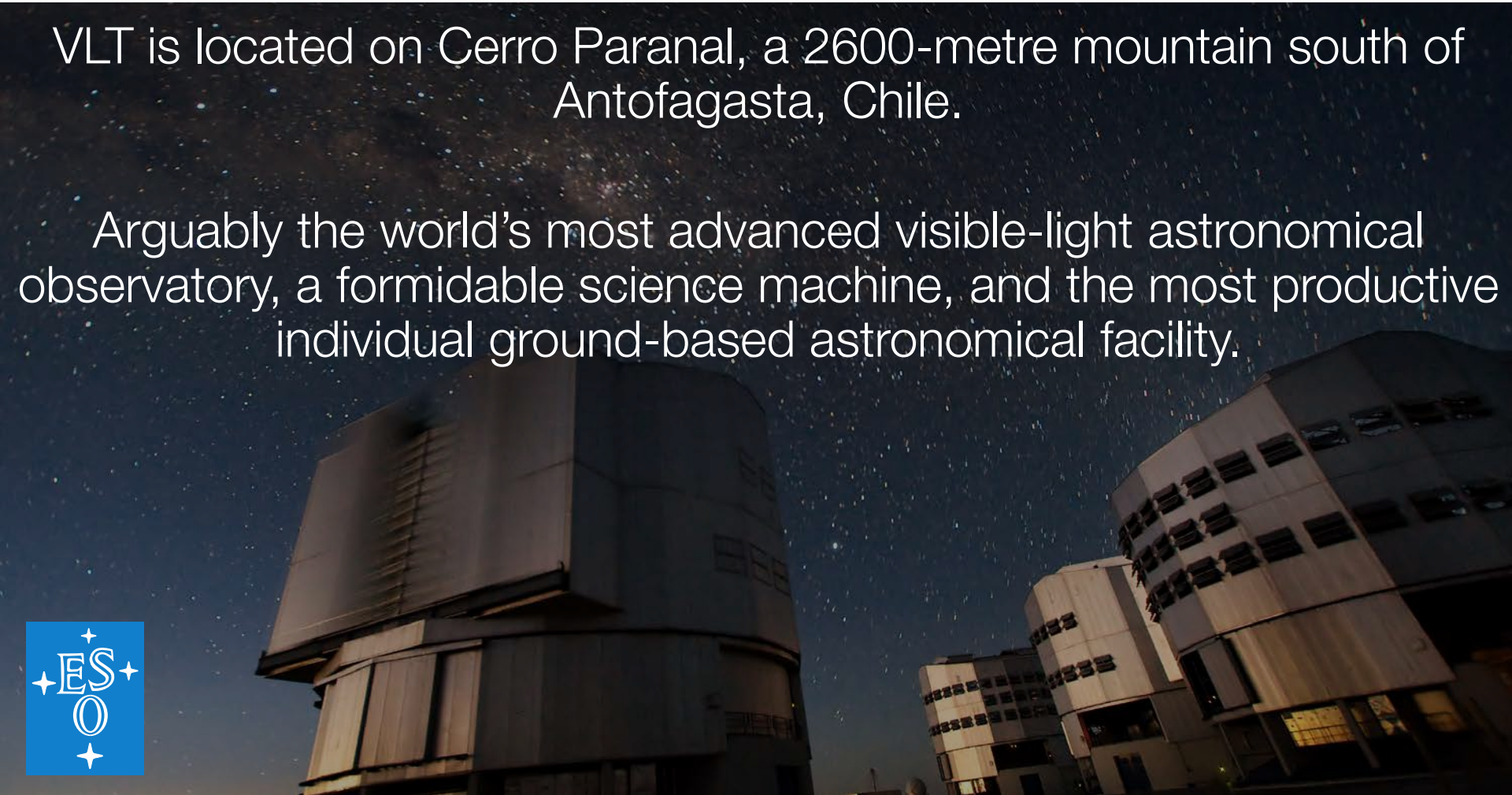
La Silla has been an ESO stronghold since the 1960s. Here, ESO operates two of the most productive 4-metre-class telescopes in the world.

With the 3.6-metre telescope + HARPS, the New Technology Telescope, and a host of national telescopes La Silla remains at the forefront of astronomy

Paranal

Very Large Telescope (VLT)

About the VLT



VLT is located on Cerro Paranal, a 2600-metre mountain south of Antofagasta, Chile.

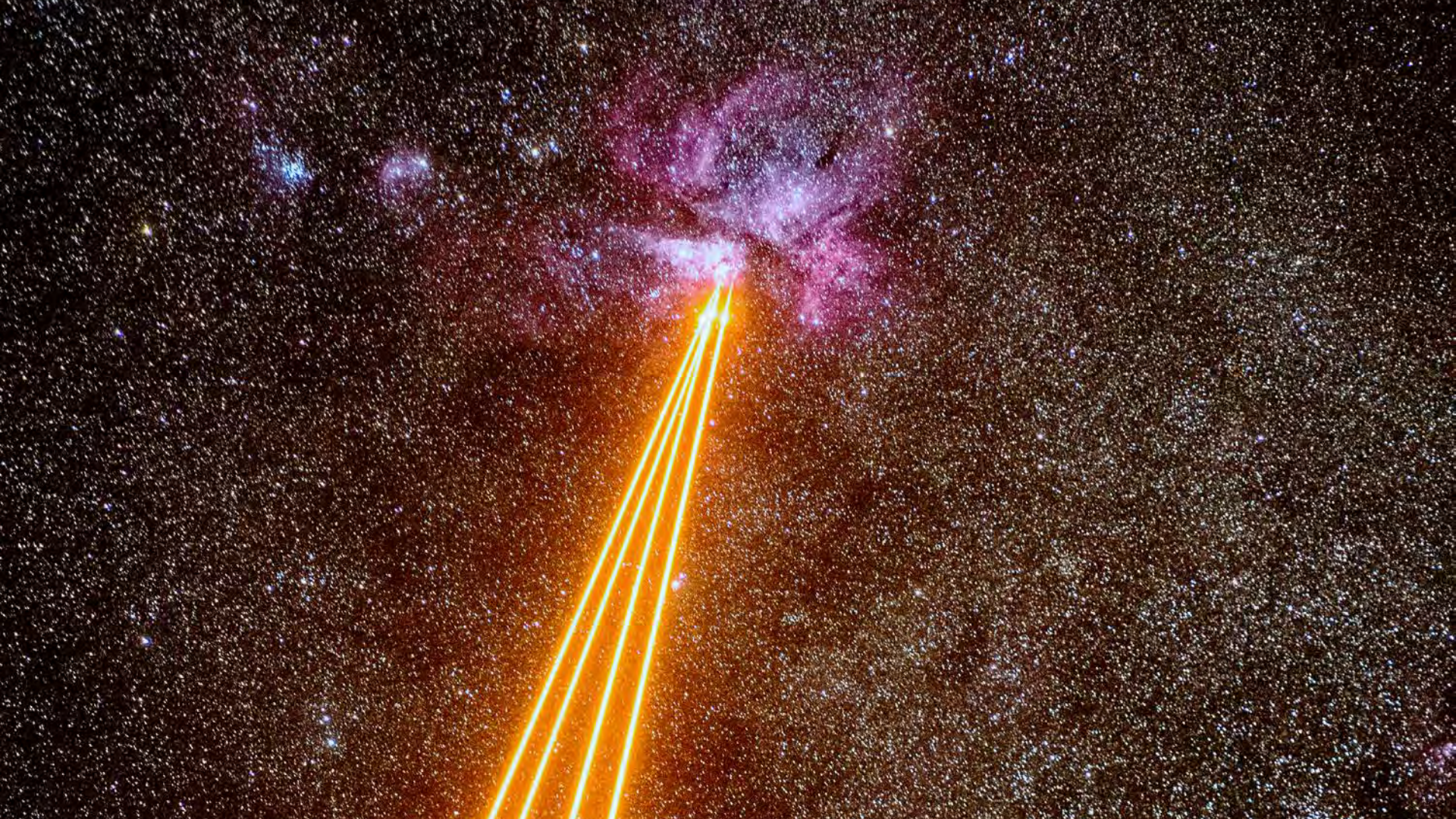
Arguably the world's most advanced visible-light astronomical observatory, a formidable science machine, and the most productive individual ground-based astronomical facility.

Four 8.2-metre Unit Telescopes, called Antu, Kueyen, Melipal, and Yepun

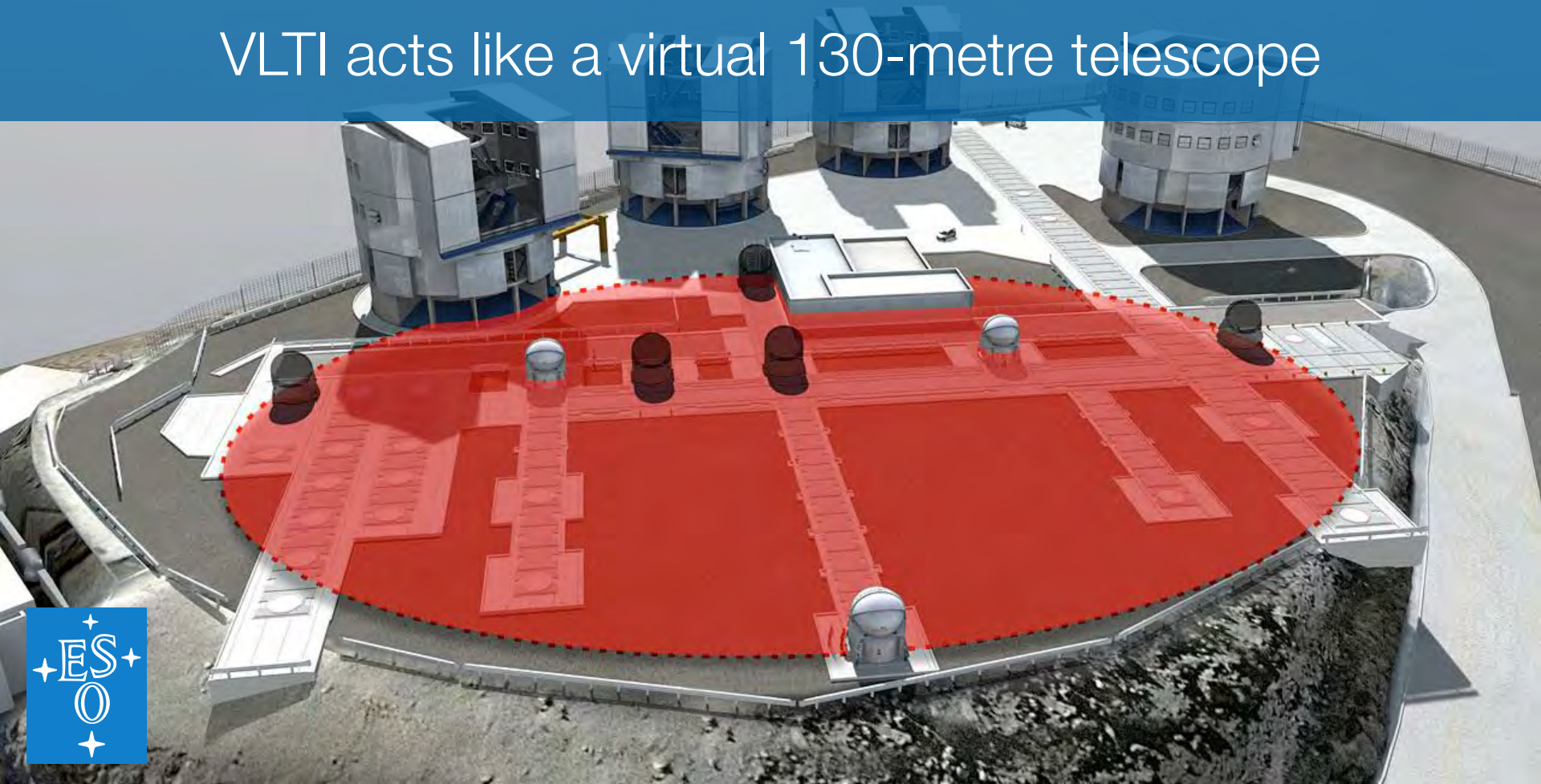
Four 1.8-metre movable Auxiliary Telescopes

VLT’s combined mirror area is equivalent to that of a 16-metre telescope, which effectively makes it the largest optical telescope in the world.

VLT uses Active optics, Adaptive optics and Interferometry to improve the image quality



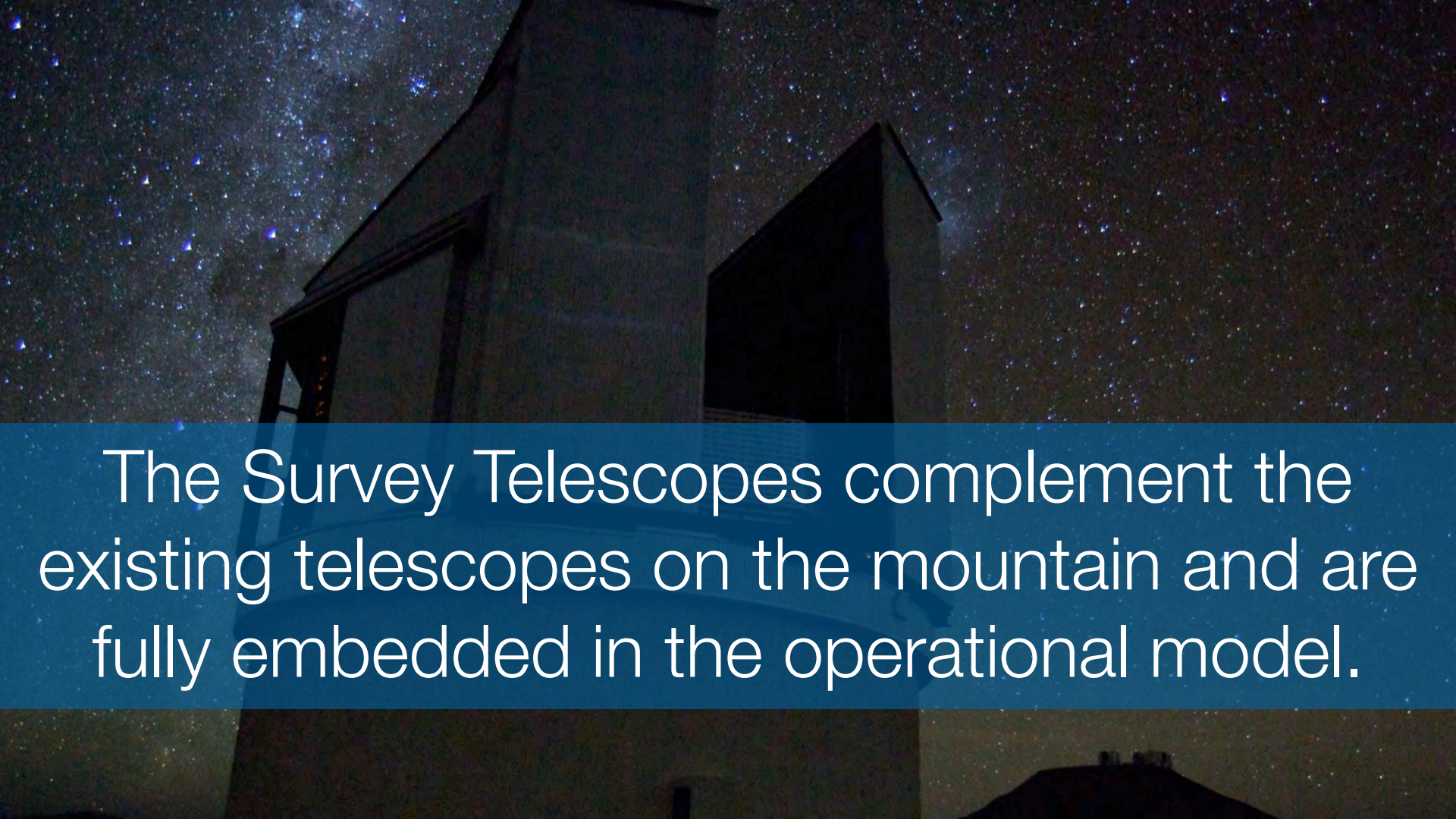
VLTI acts like a virtual 130-metre telescope



La Residencia offers ESO staff and visitors a haven away from the harsh Atacama Desert.

60 000 litres of water

are consumed at Paranal every day, with two delivery trucks making the daily trip from Antofagasta.

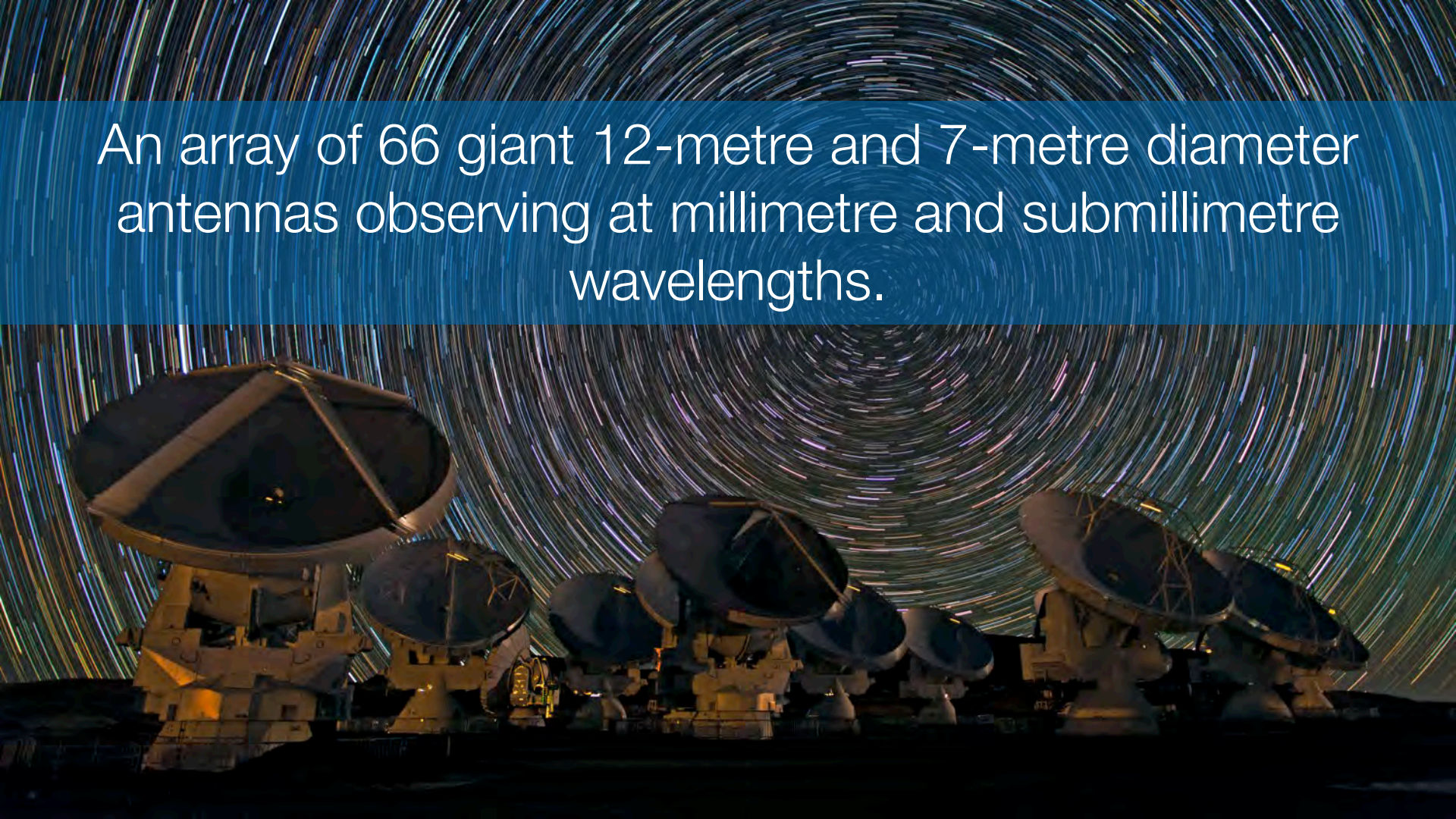


The Survey Telescopes complement the existing telescopes on the mountain and are fully embedded in the operational model.

The Chajnantor Plateau

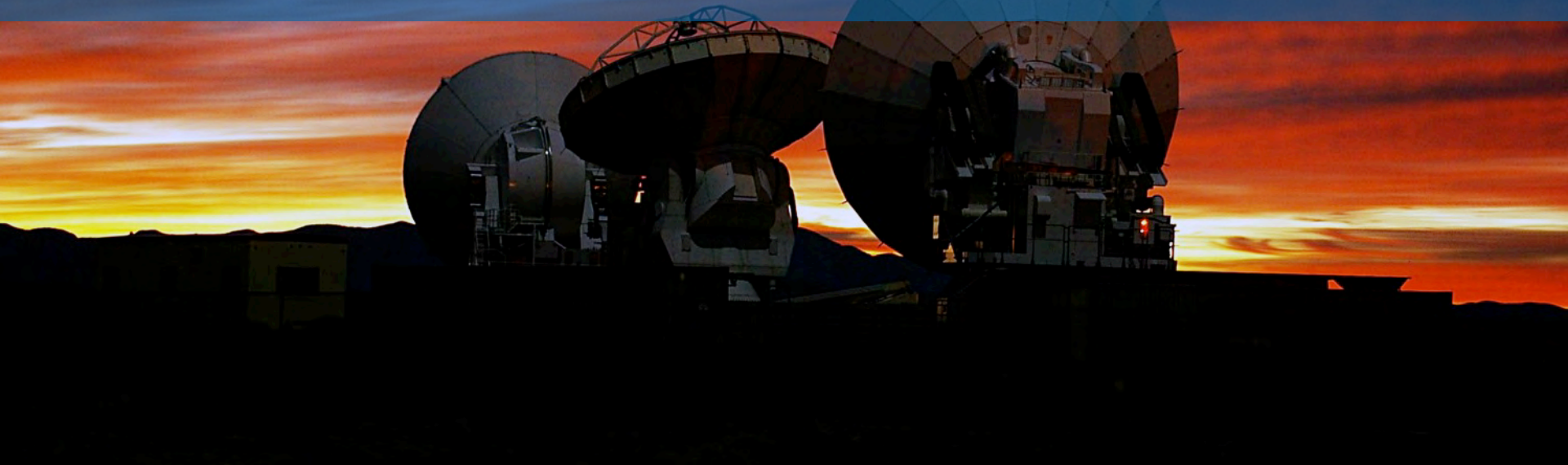
5000 metre altitude in the Atacama Desert


The ALMA Project is a global partnership between the scientific communities of East Asia, ESO and North America with Chile.


An array of 66 giant 12-metre and 7-metre diameter antennas observing at millimetre and submillimetre wavelengths.

ALMA is the largest astronomical project in existence.

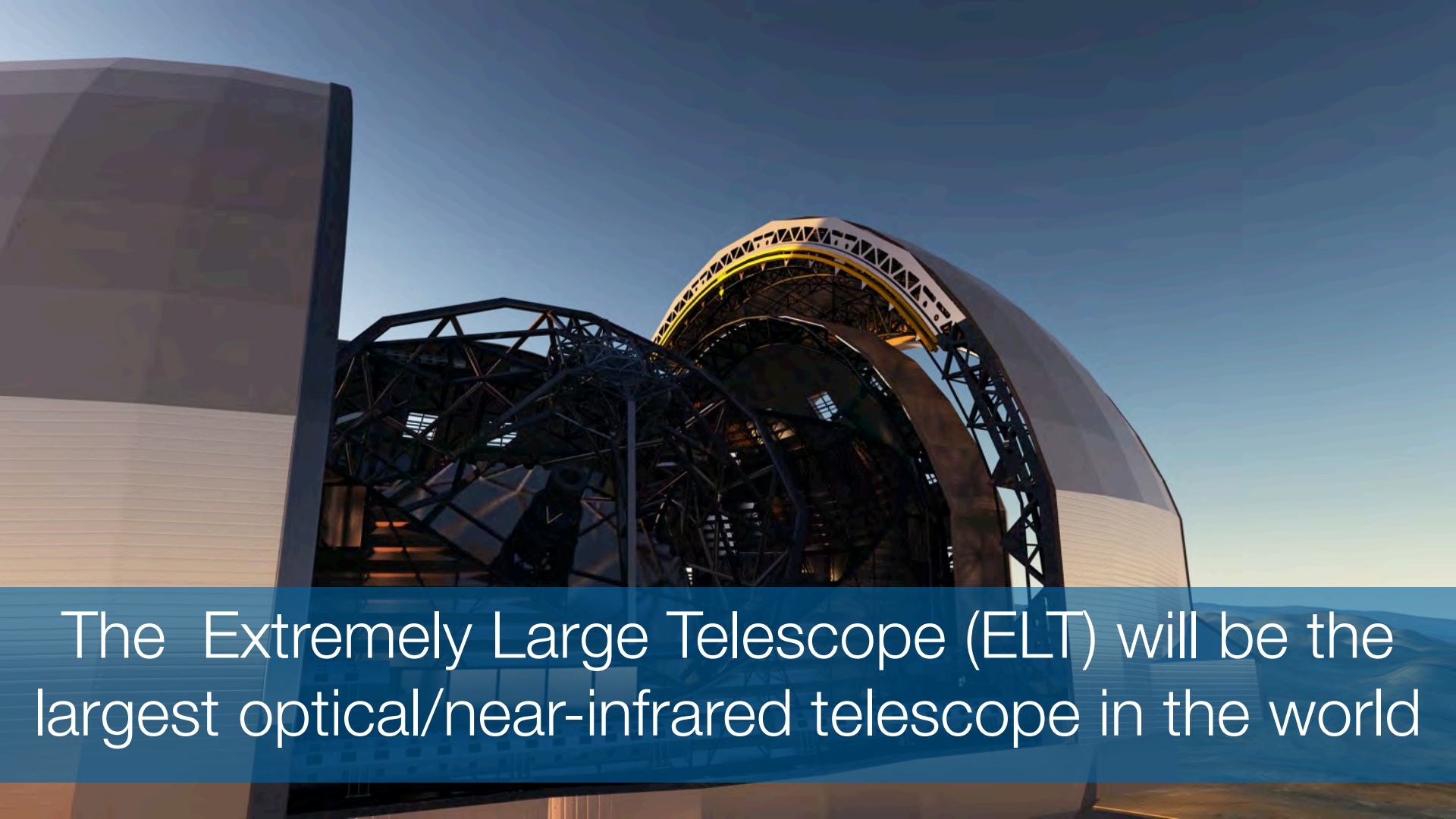
ALMA is the most powerful telescope for observing the cool Universe — molecular gas and dust — as well the distant Universe. ALMA is studying the building blocks of stars, planetary systems, galaxies and life itself.



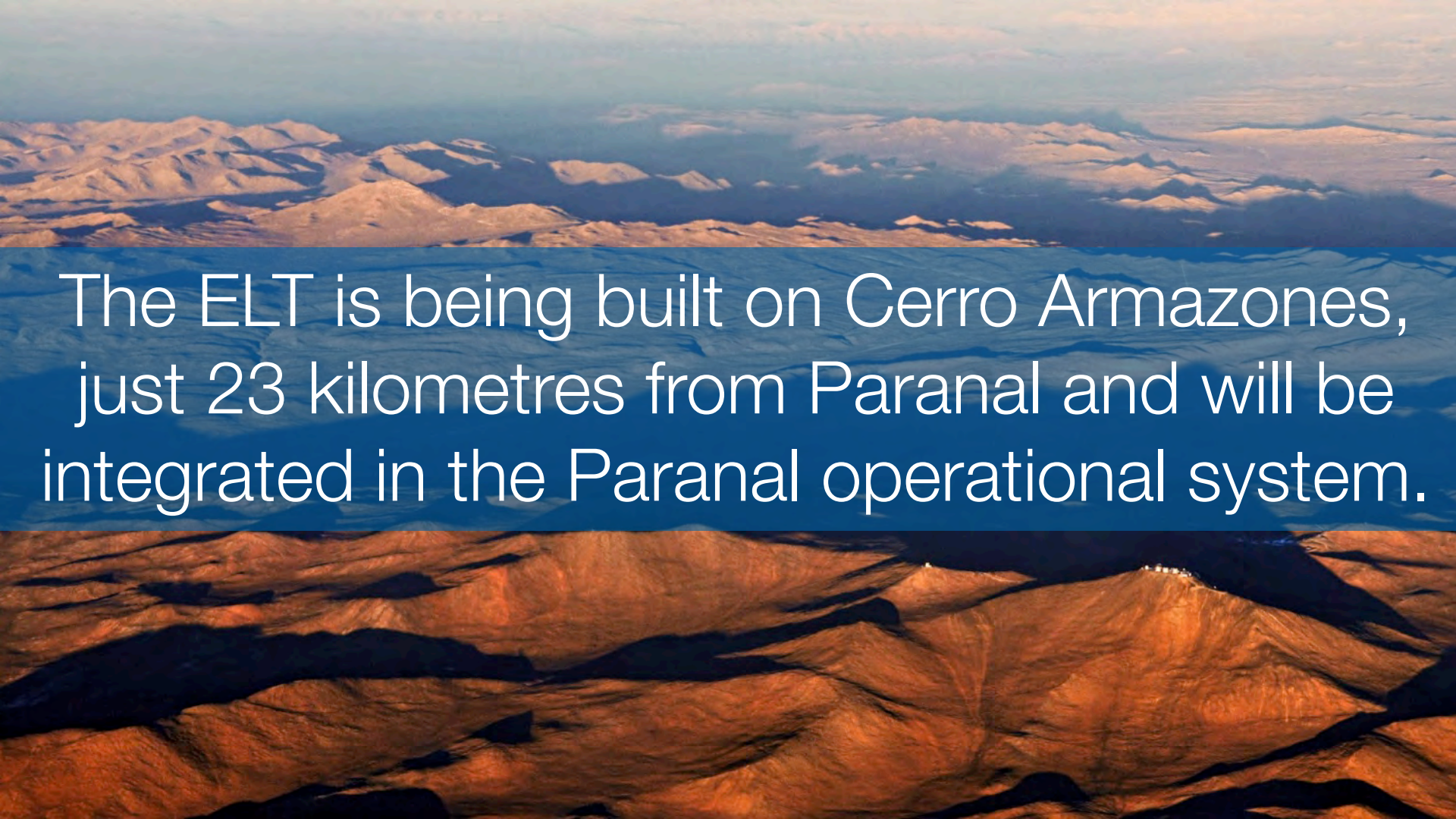

ALMA has a resolution up to ten times better than the NASA/ESA Hubble Space Telescope.


SCHEUERLE

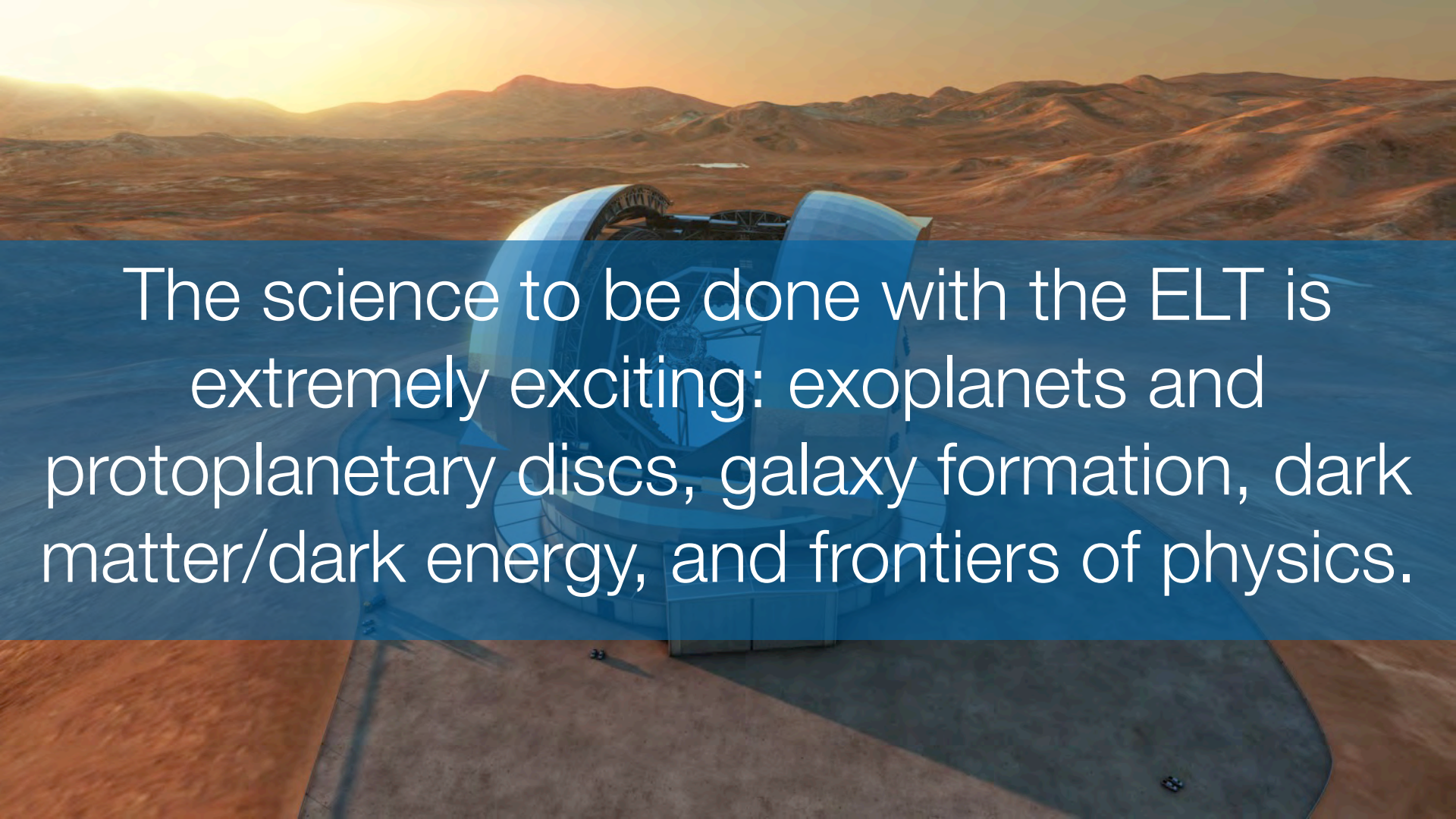

The Atacama Pathfinder Experiment (APEX) telescope is a 12-metre telescope, located at 5100-metre altitude on the arid plateau of Chajnantor in the Chilean Andes.



The Extremely Large Telescope (ELT) will be the largest optical/near-infrared telescope in the world

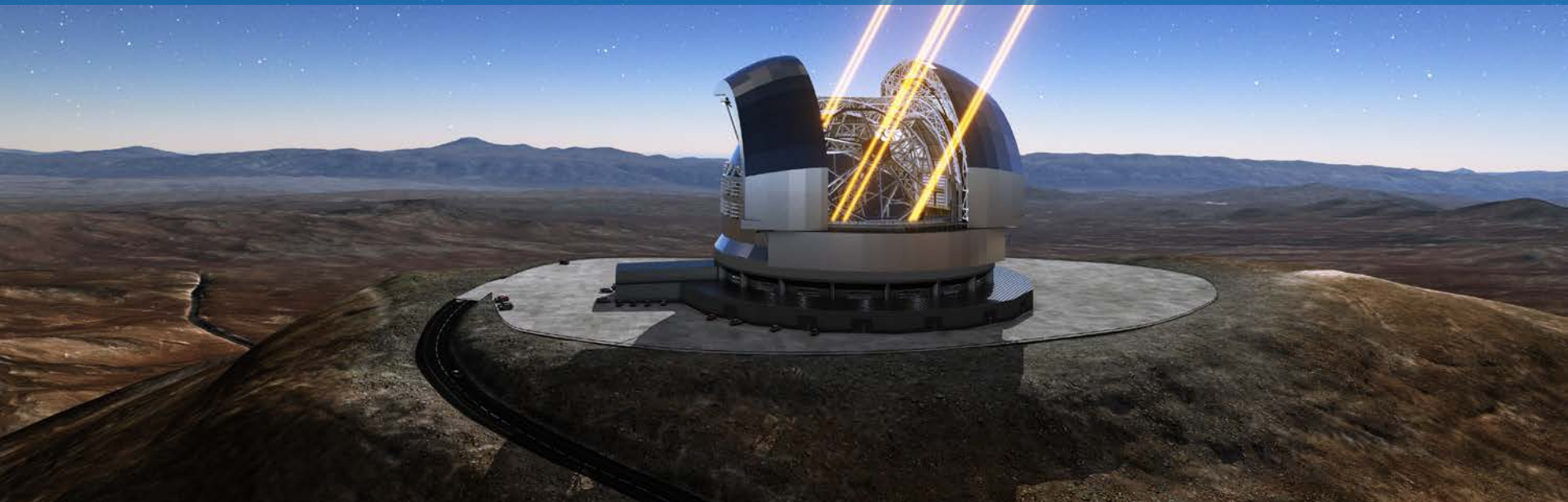

The ELT is being built on Cerro Armazones, just 23 kilometres from Paranal and will be integrated in the Paranal operational system.


The ELT will have a main mirror 39 metres in diameter.


The science to be done with the ELT is extremely exciting: exoplanets and protoplanetary discs, galaxy formation, dark matter/dark energy, and frontiers of physics.

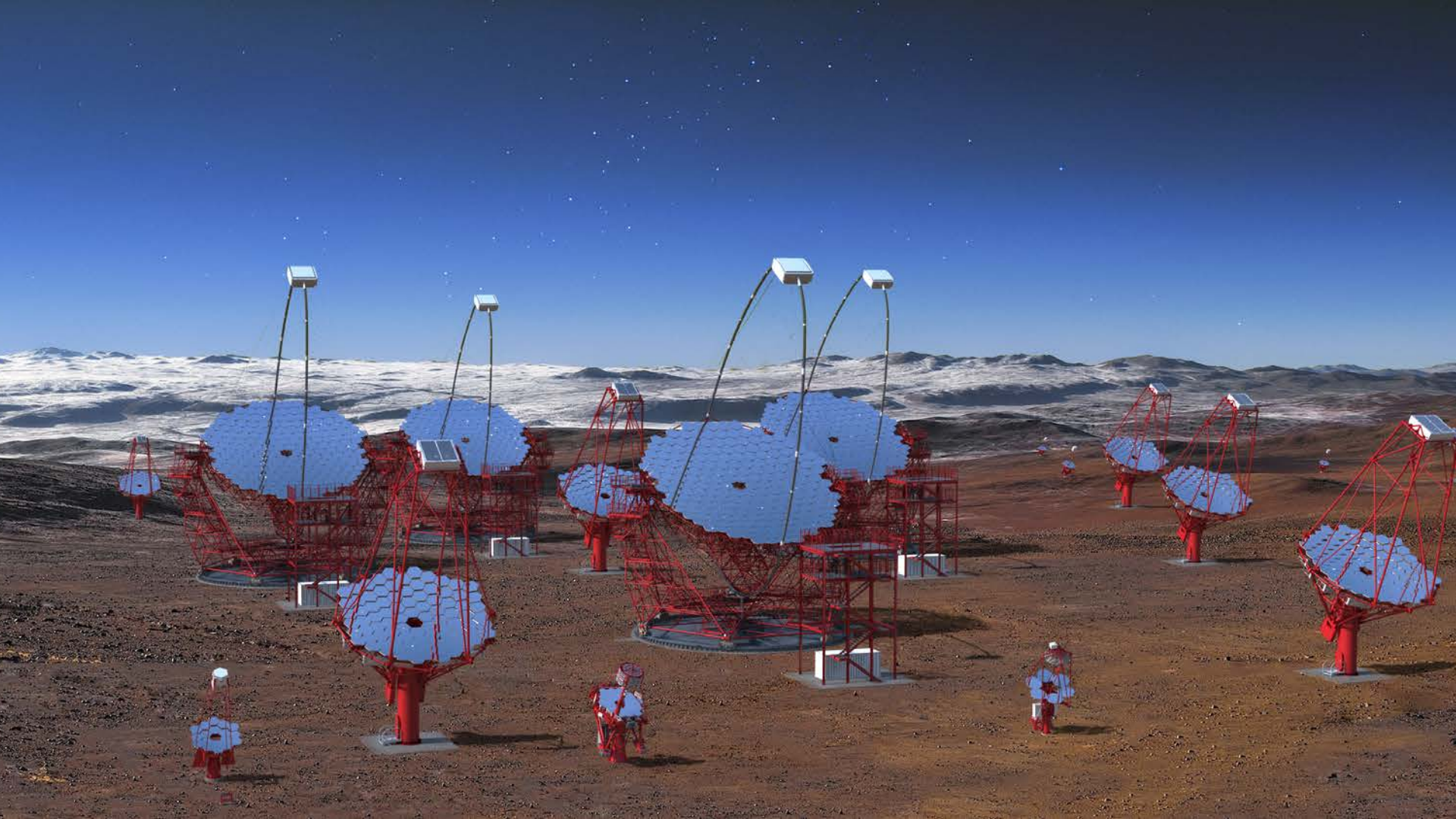

ESO

The ELT will be able to correct for the atmospheric distortions (i.e., fully adaptive and diffraction-limited) from the start, providing images about 15 times sharper than those from the Hubble Space Telescope.




The cost to completion for the ELT is 1.1 billion euros.


The Cherenkov Telescope Array’s southern part will be located here



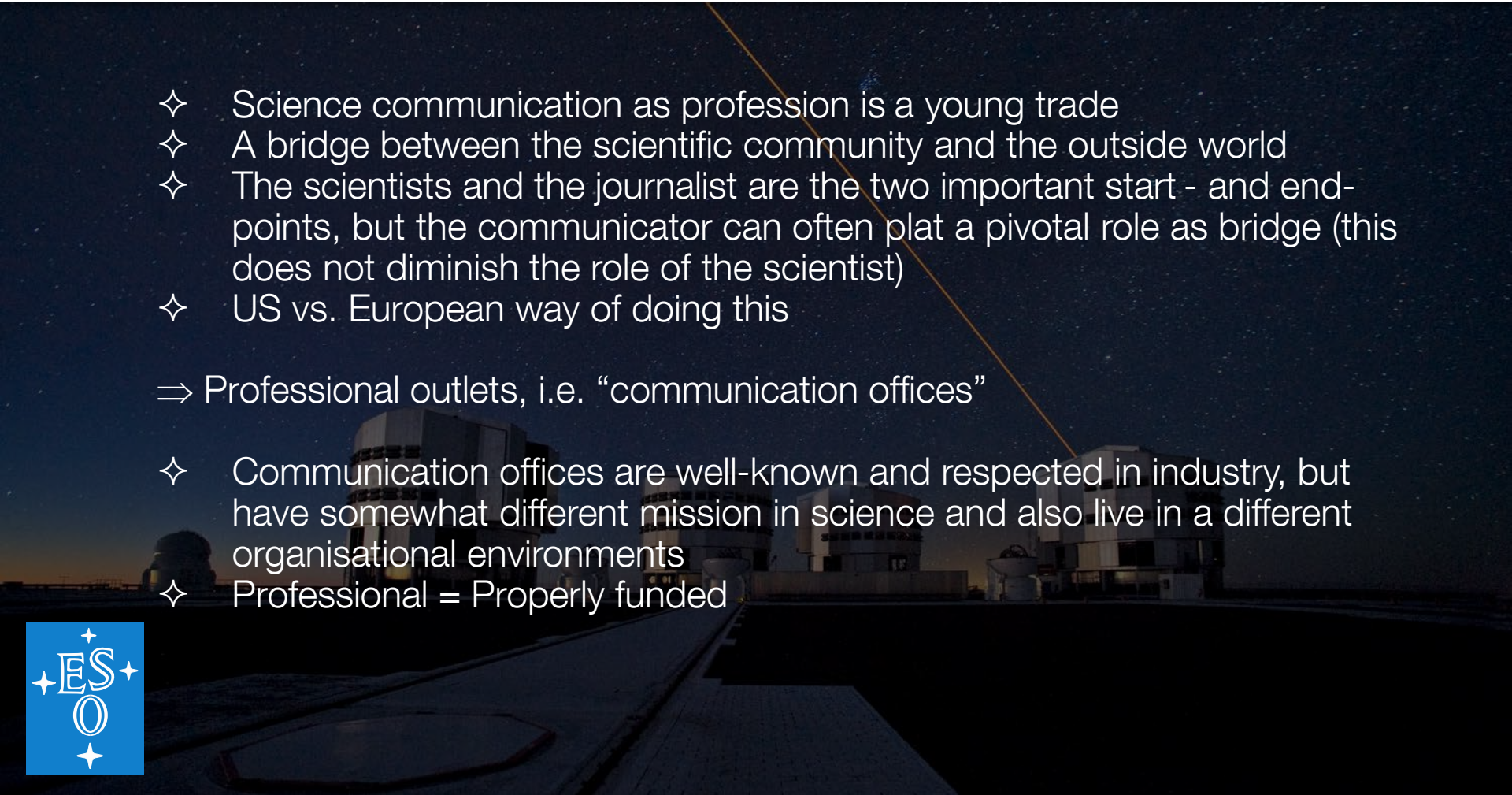
Why is astronomy the coolest science there is?

- One of the greatest adventures in the history of mankind
- Astronomy is *visual*!
- Space is an all-action, violent arena with exotic phenomena that are counter-intuitive, spectacular, mystifying, intriguing, dazzling, fascinating
- A large element of discovery
- The field is extremely fast moving, delivering new results on a daily basis
- Touches the largest philosophical questions of the human race: Where do we come from? Where will we end? How did life arise? Is there life elsewhere in the Universe?
- Astronomy can lead the way for other natural sciences and be a frontrunner in science communication

Why science communication?

- We live in an era of unprecedented scientific progress
- The growing impact of technology has brought science ever more into our daily lives
- Science directly influences the quality of people's lives
- It is difficult for laypeople to make informed decisions about these issues
- Recruitment for a steady increasing need for S&T manpower in a globalizing world
- To inform the public about the unprecedented scientific progress
- To continue recruiting new scientists and to stop the Brain-drain
- To support the funding loop

How to do proper institutional communication?

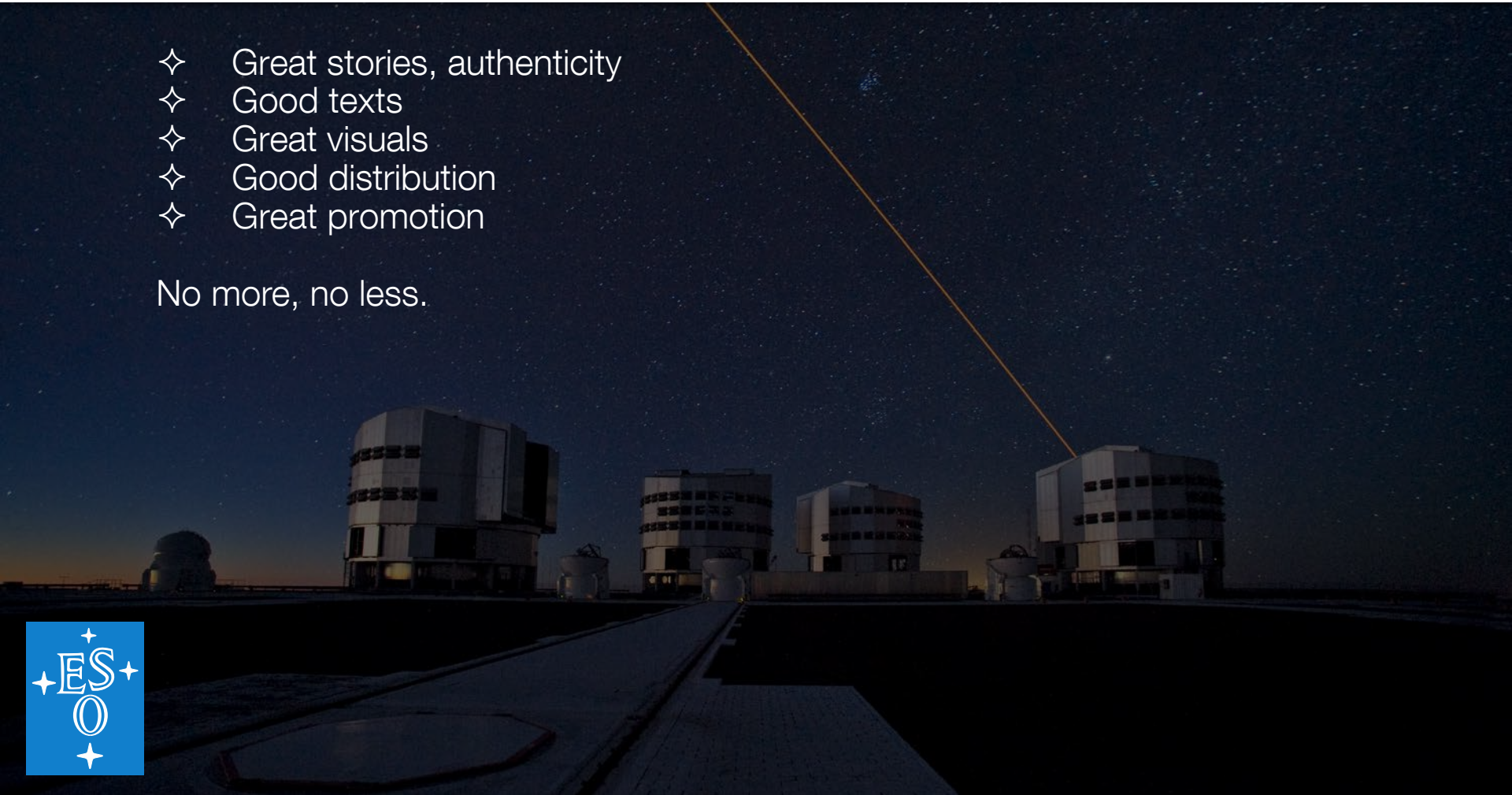


- Science communication as profession is a young trade
- A bridge between the scientific community and the outside world
- The scientists and the journalist are the two important start - and end-points, but the communicator can often plat a pivotal role as bridge (this does not diminish the role of the scientist)
- US vs. European way of doing this

⇒ Professional outlets, i.e. “communication offices”

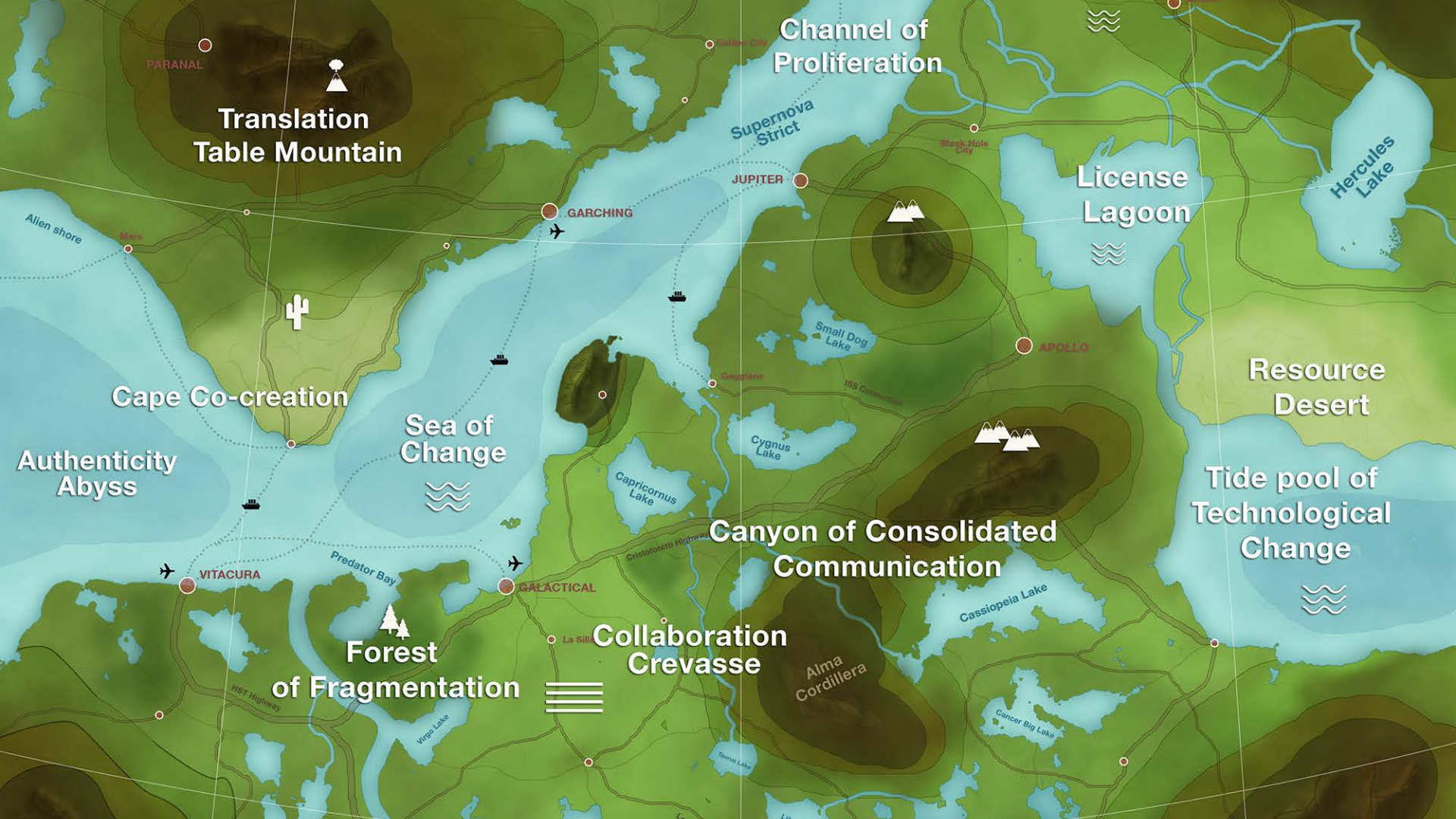
- Communication offices are well-known and respected in industry, but have somewhat different mission in science and also live in a different organisational environments
- Professional = Properly funded

How to do proper institutional communication?

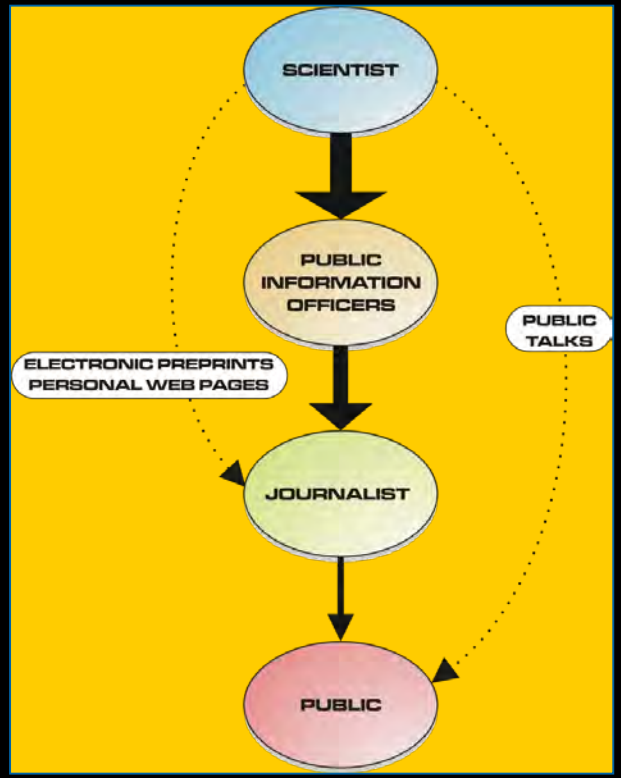


- Great stories, authenticity
- Good texts
- Great visuals
- Good distribution
- Great promotion

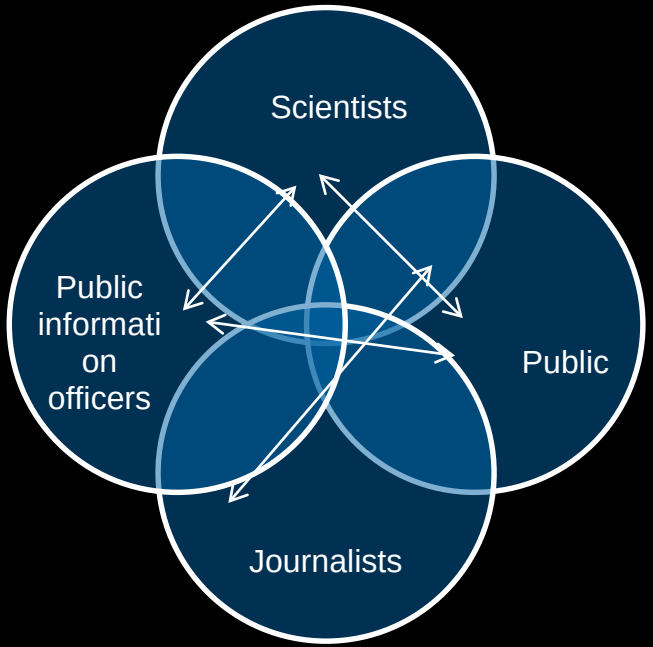
No more, no less.


Channel of Proliferation
PARANAL
Translation Table Mountain
Supernova Strict
JUPITER
License Lagoon
Hercules Lake
GARCHING
Alien shore
Mars
Small Dog Lake
APOLLO
Resource Desert
Cape Co-creation
Sea of Change
Authenticity Abyss
Cygnus Lake
Capricornus Lake
Tide pool of Technological Change
Canyon of Consolidated Communication
Predator Bay
VITACURA
GALACTICAL
Cassiopeia Lake
Collaboration Crevasse
Forest of Fragmentation
Alma Cordillera
HST Highway
Virgo Lake
Cancer Big Lake

The Changing Communication Flow



Conventional (e.g. press releases)



Contemporary, complex (blogging, social media …)

The Changing Communication Flow (case ESO)

In today's fast-changing world of the new media it is no longer sufficient to walk the safe and well-trodden path. We need to follow the latest social trends, by being present in pop culture, teaming up with commercial partners, and engage in unconventional activities that build a bridge between the often isolated scientific world and the "real world".

- ✧ Focusing on community coordination since June 2010
- ✧ Social media strategy set up and implemented
- ✧ Embracing the new communication flows and make fewer assumptions about the recipients

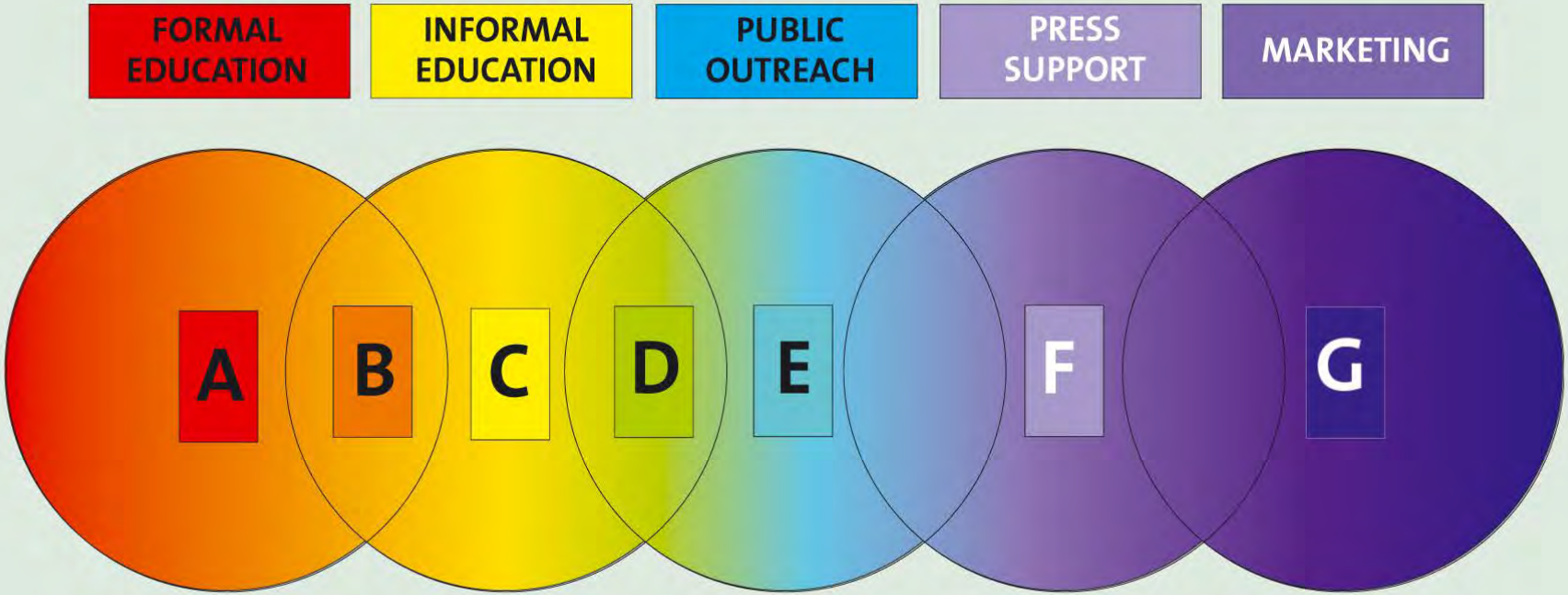
Scientist delivers to PIO	⟷	PIO delivers to scientist
Top class scientific results		Manpower to 'promote' the scientist's results
A clear overview of the field		An outsider's (and expert's) view on what constitutes the most interesting parts of the result (the angle)
Links to good literature		Press release texts
Explanations and answers to (sometimes stupid) questions		Press release visuals
Patience		Sometimes a Video News Release
Quick response to the PIO's requests		A wide distribution through the media and others
Raw images, image ideas, illustration ideas		
Scientific proofreading of press releases, visuals etc in the final approval phase		
Availability (to PIO himself or to journalist)		

PIO delivers to journalist	⟷	Journalist delivers to PIO
Good news stories picked from the best scientific resources		Visibility to science
Summarised info		(Positive) publicity for organisation or project
Excellent visuals		A wide dissemination of the information
Contacts for scientists		
Some exclusive stories		
Special services if needed		
Additional info: scientific papers, web links, factsheets etc.		
A steady flow of news stories		

Journalist delivers to end-user	⟷	End-user delivers to journalist
Excellent journalistic writing		Payment
Selection of the best results		Loyalty
Reasonable or good visuals		
Timely delivery		

Scientist	PIO	Journalist
Values advanced knowledge	Uses the advanced knowledge in a broad context	Values diffuse knowledge
Values technical language	Reshapes technical language into simple language	Values simple language
Values near certain information	Uses facts, but also more speculative indications to give perspective	Values indications
Values quantitative information	Balances facts with emotional and personal accounts	Values qualitative information
Values near complete information	"Cuts through" when the results are trustworthy, but perhaps still not complete	Values incomplete information
Values narrow information	Uses the frontline narrow science to open doors to the broader context	Values comprehensive broad spectrum information
Specialist	Specialist in communicating science to the general public	Generalist
Theorist	Understands theory and applies it in the real world context	Pragmatist
Values knowledge for knowledge's sake	Focuses on the knowledge that is relevant to society	Focuses on what is relevant to society
Is cumulative	Is very picky with which information to accumulate	Is non-cumulative
Is slow	Can develop stories over long time, but always delivers on time	Is fast
Enjoys high professional status	Respects all other actors	Is in the lower ranks of professional status

Typical spectrum of institutional activities



ESO - Mozilla Firefox

File Edit View History Bookmarks Tools Help

ESO

web.archive.org/web/20071030051006/http://www.eso.org/public/

Google

INTRANET Citrix XenApp - Logon Google ackerTodo v4.2 W4 - Education and P... ESO ESA/Hubble Google Translate Portal to the Universe ESO - Announcement... W4 - Education and P...

ESO
European Organisation for Astronomical Research in the Southern Hemisphere

Member of the EIROforum

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30 Oct 2007

ESO for the Public

- About ESO
- Gallery
- Press and Media
- Events
- Outreach
- Astronomy at ESO
- Relations with Industry
- Working at ESO

Science Users

On this site you can find a wealth of fresh information about ESO, one of the most vibrant and dynamic research organisations in the world, dedicated to astronomy and astrophysics. more...

Welcome to ESO

ESO is the intergovernmental European Organisation for Astronomical Research in the Southern Hemisphere. On behalf of its thirteen member states ESO operates a suite of the world's most advanced ground-based astronomical telescopes located at the La Silla Paranal Observatory in the Atacama desert in Chile. The ESO Headquarters are situated in Garching near Munich, Germany.

Latest News

- Commissioner Potočnik at Paranal Observatory (29.10.2007)
- List of prize winners of the 2007 Open House Night Quiz and Passport Game. (17.10.2007)
- Drizzly Mornings on Xanadu (11.10.2007)
- A Colossus Gets its Name (5.10.2007)
- The 'Catch a Star' competition returns for its sixth year (5.10.2007)

more news

Announcements

- Astronomy from Planet Earth - the new ESO movie is available for download.
- The new ESO brochure "A Universe of Discoveries" is available (English and German)
- The ESO Annual report 2006 is available - English [PDF: 6.0 MBytes]

Photo of the Week

Commissioner Potočnik at Paranal Observatory - more...

ESO Video

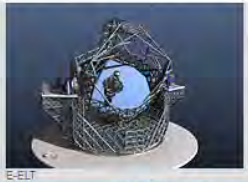
stop downloading video

Watch the ESO movie!

La Silla

The Very Large Telescope

ALMA



E-ELT

Last Update: 15.10.07 ©ESO

Send us your comments! | Subscribe to Newsletter | Privacy Statement

ePOD's first 5 years, 2008-2013:

Turn ESO's outreach into a light-house for science communication.


ePOD’s next 10 years, 2013-2023:
To make ESO a household science brand in the eyes of the Member State tax-payers, Chile and beyond!

ePOD “Phase 2”

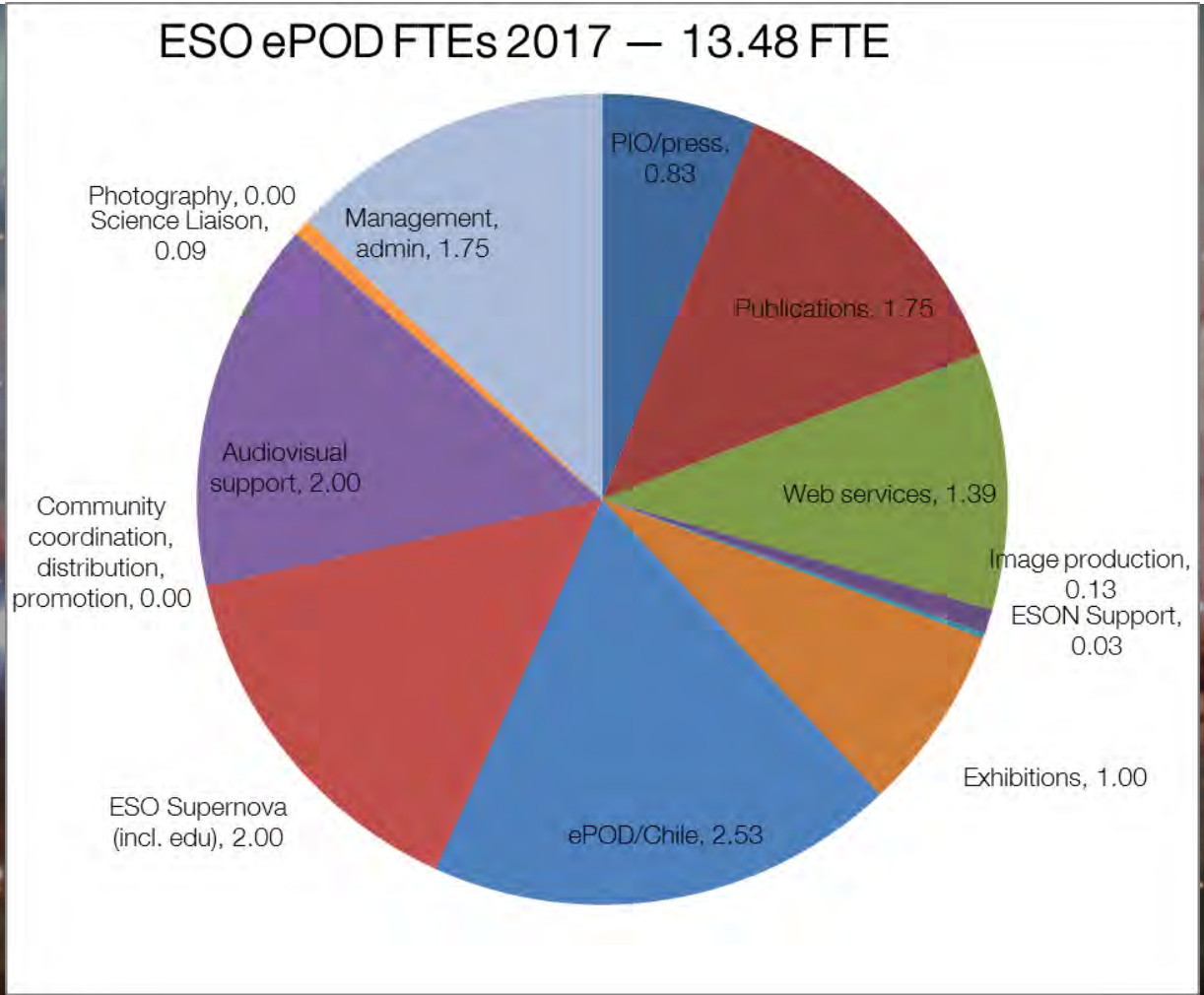
1. Embracing (and surviving) the opportunities of the **ESO Supernova**!
2. Building the **E-ELT** brand, continuously communicating the progress and its future results, increasing its visibility and popularity.
3. Consolidating the **ALMA brand**, by continuing the well-oiled communication pipeline for the ALMA developments and results, as well as strengthening the EPO collaboration between the Executives.
4. **Solar Eclipse** La Silla 2019
5. Adopting **new trends** in communication:
   - Embracing the new communication flows and make fewer assumptions about the recipients
   - Consolidating and expanding ESO’s social media presence
   - Developing more projects based on co-creation
   - Making use of new technologies
6. Expanding our **educational** role. (ESO Supernova).
7. Expanding **locally in Germany**. (ESO Supernova).
8. Enhancing the **ESO brand**. ESO already has a very solid Visual Identity, but we need to implement it more widely so that all activities, products, and even buildings and hardware will bear the ESO emblem. Buildings etc.
9. Use all the **new national telescopes** at La Silla and Paranal.

ePOD, status

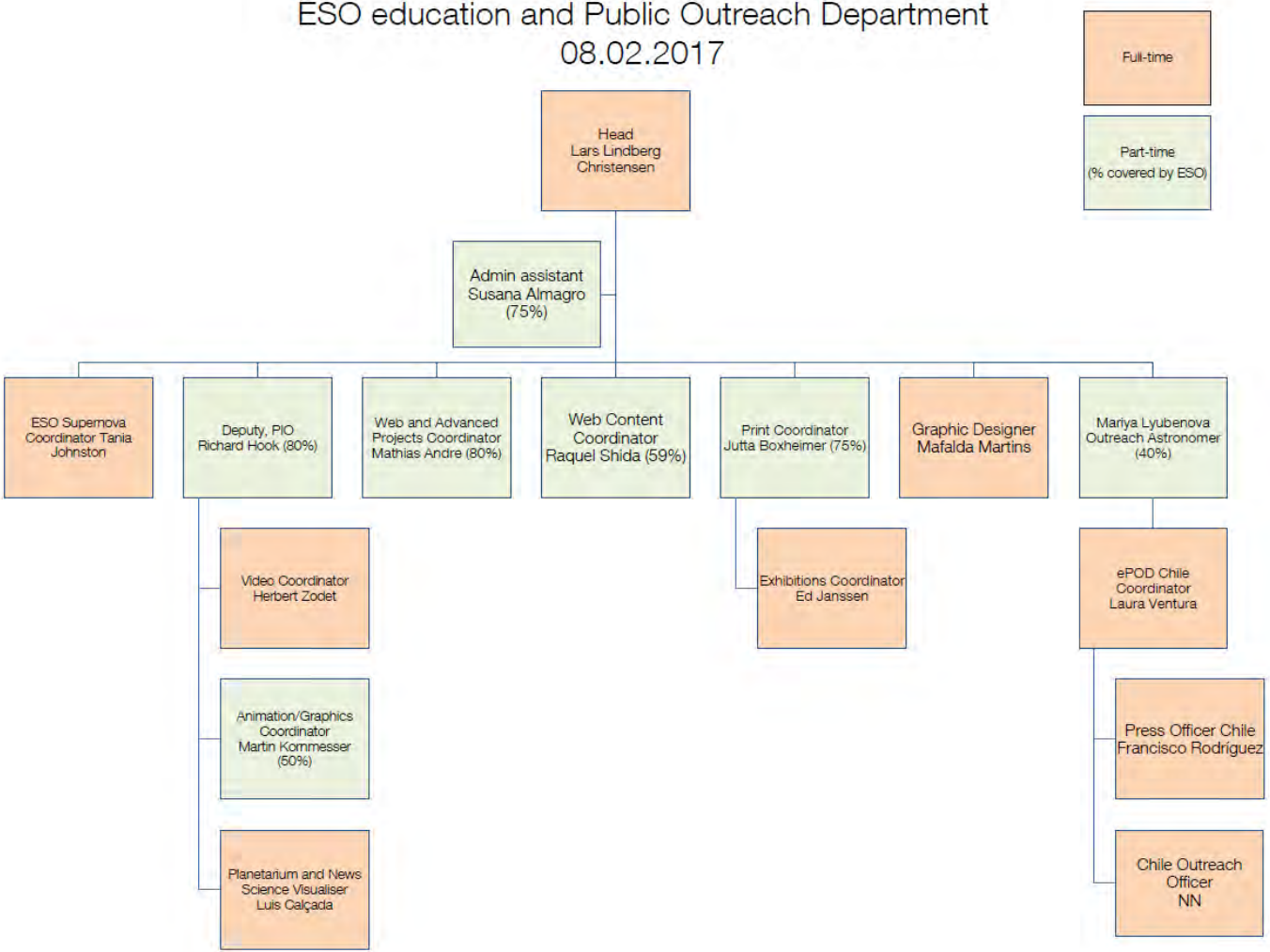
“It was the best of times, it was the worst of times, it was the age of wisdom, it was the age of foolishness, it was the epoch of belief, it was the epoch of incredulity, it was the season of Light, it was the season of Darkness, it was the spring of hope, it was the winter of despair…”

Charles Dickens, A Tale of Two Cities (1859)

Who are we?


ESO ePOD FTEs 2017 — 13.48 FTE
PIO/press, 0.83
Publications, 1.75
Web services, 1.39
Image production, 0.13
ESON Support, 0.03
Exhibitions, 1.00
ePOD/Chile, 2.53
ESO Supernova (incl. edu), 2.00
Community coordination, distribution, promotion, 0.00
Audiovisual support, 2.00
Photography, 0.00
Science Liaison, 0.09
Management, admin, 1.75

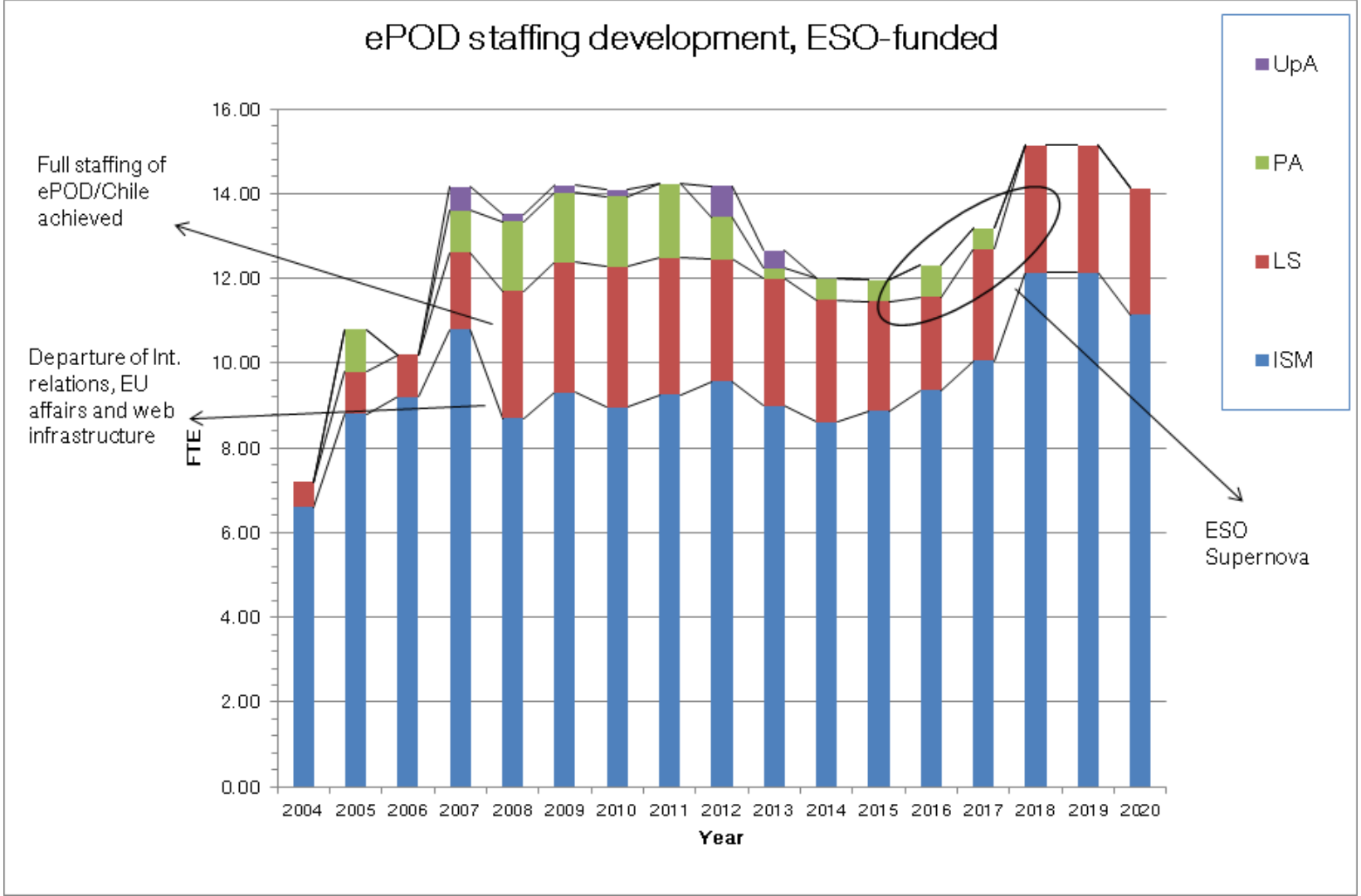
ESO education and Public Outreach Department
08.02.2017



Who are we today?

The ePOD staffing is at the lowest level since 2006
ESO: 13.48 FTE + 2 Intern

- ESA: 0.8 FTE + 0.75 Intern
- IAU: 0.4 FTE
- Contractors (~200 KEUR from 570 KEUR total expenditure – same level as 2006!)
- Networks: Volunteers, partners


ePOD staffing development, ESO-funded
UpA
PA
LS
ISM
Full staffing of ePOD/Chile achieved
Departure of Int. relations, EU affairs and web infrastructure
ESO Supernova
FTE
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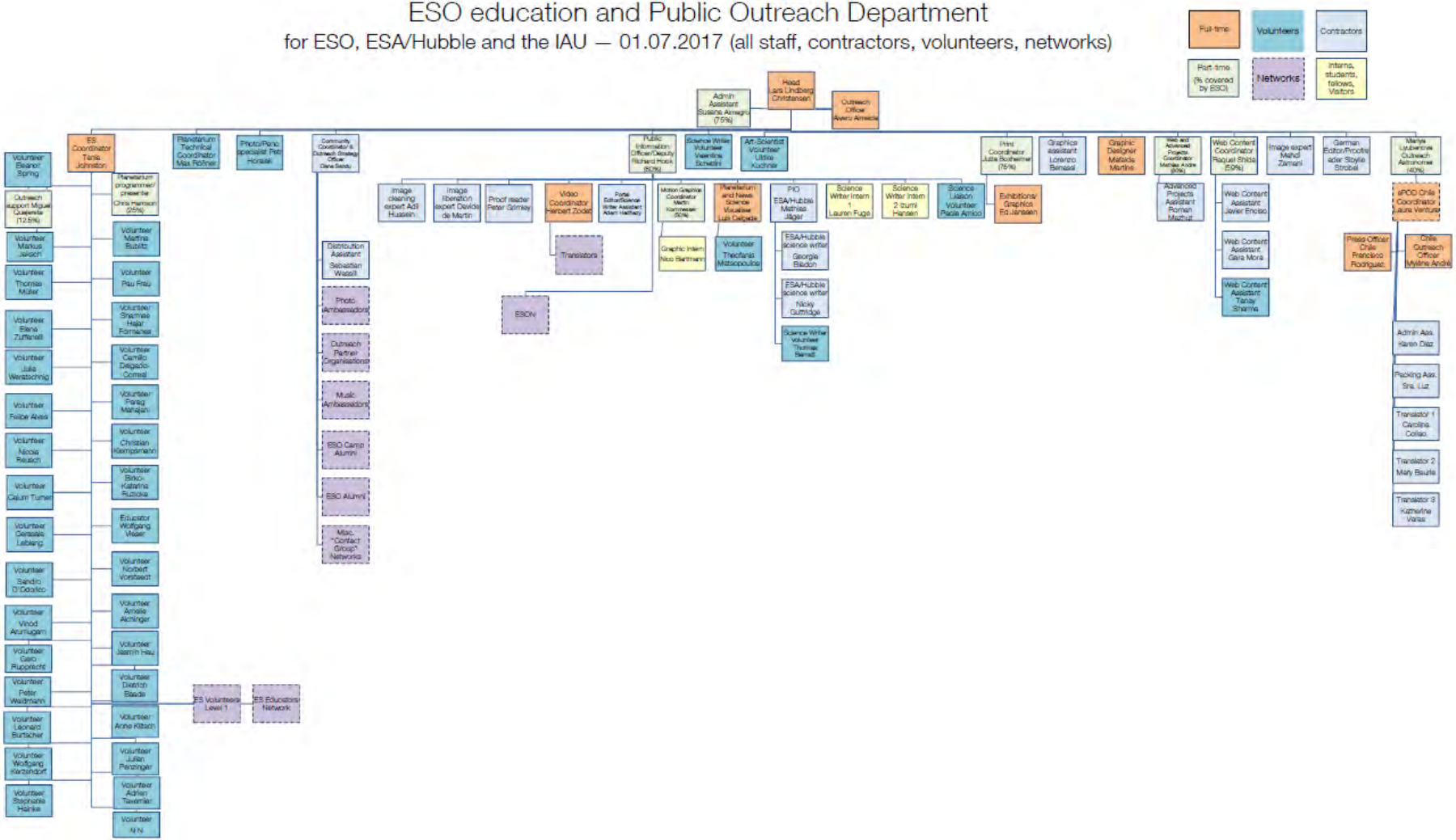
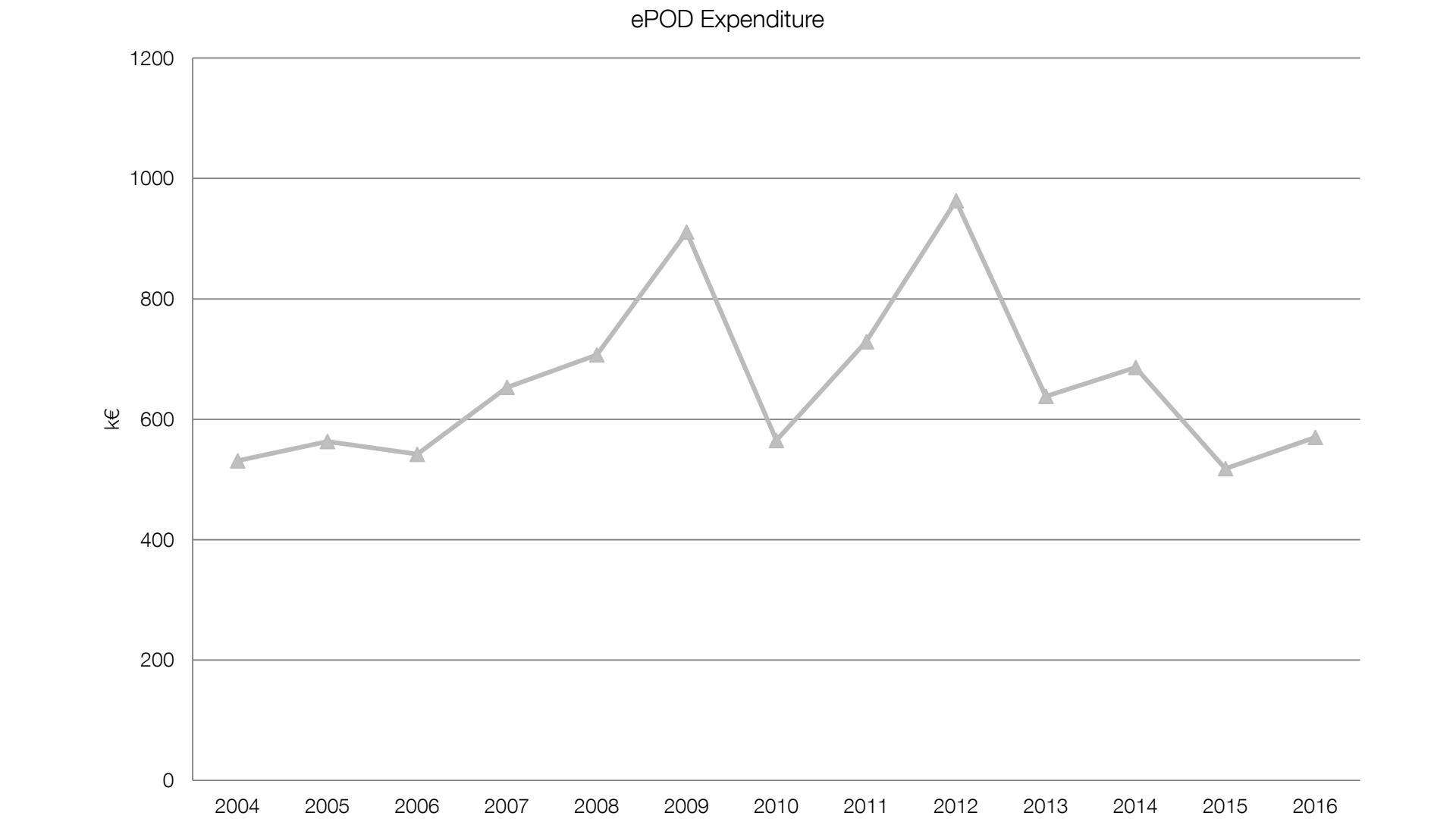
2020

ESO education and Public Outreach Department

for ESO, ESA/Hubble and the IAU — 01.07.2017 (all staff, contractors, volunteers, networks)




ePOD Expenditure
k€
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400
200
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2004
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2006
2007
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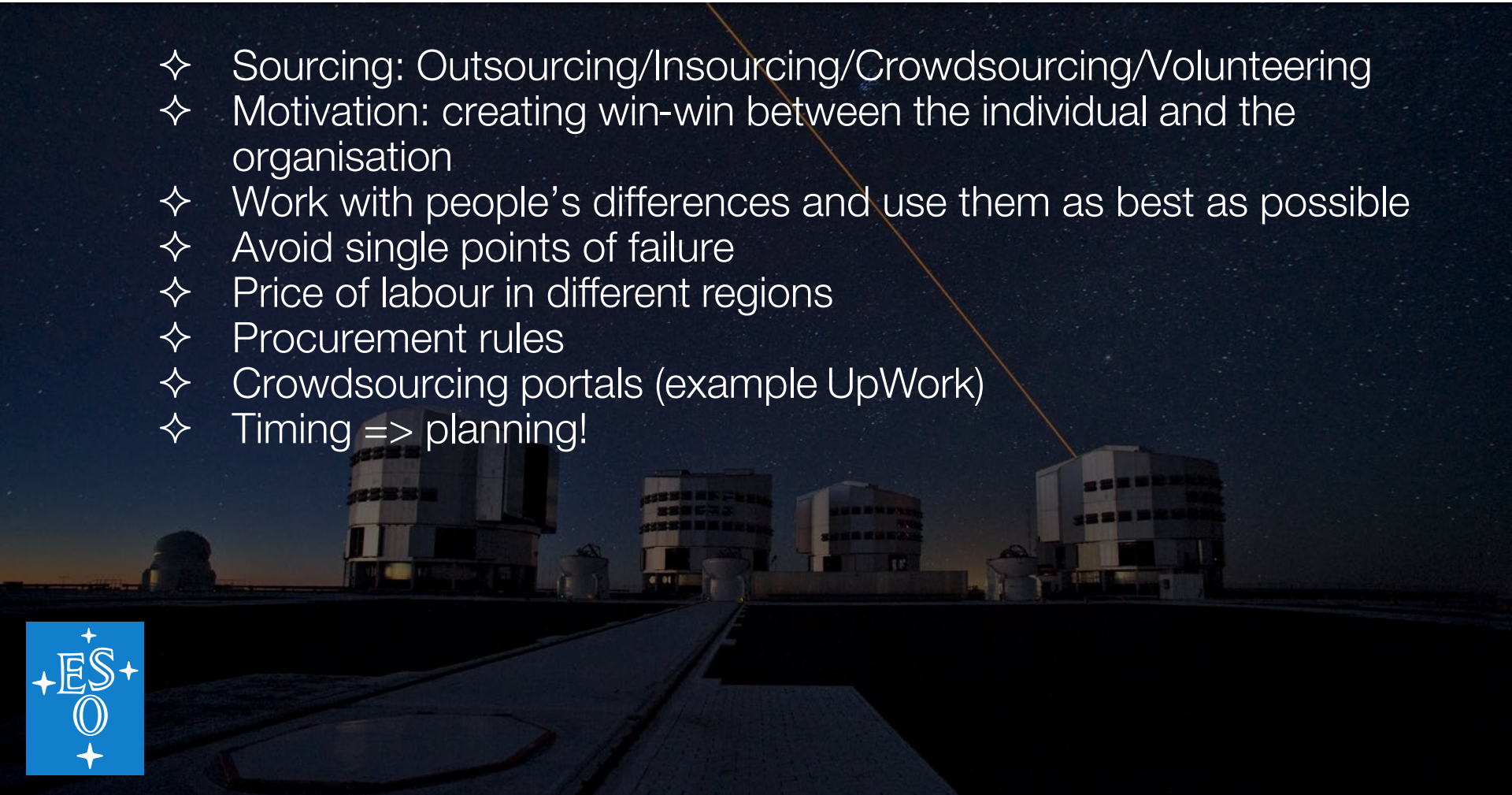
2013
2014
2015
2016

The many different communicator roles today

- Coordinator/manager/leader
- Science communicator, journalist, press officer (PIO)
- Layout designer
- Illustrator
- Motion graphic designer
- Scientist/researcher
- Educator
- Technical/IT expert and technologist
- Editor
- Proof reader
- Community coordinator, promoter
- Distribution, sales responsible, Customer relations
- Administrative assistant
- Image processing specialist
- Event organiser
- Web content coordinator
- Internal communicator
- Exhibition specialist

Staffing



- Sourcing: Outsourcing/Insourcing/Crowdsourcing/Volunteering
- Motivation: creating win-win between the individual and the organisation
- Work with people's differences and use them as best as possible
- Avoid single points of failure
- Price of labour in different regions
- Procurement rules
- Crowdsourcing portals (example UpWork)
- Timing => planning!

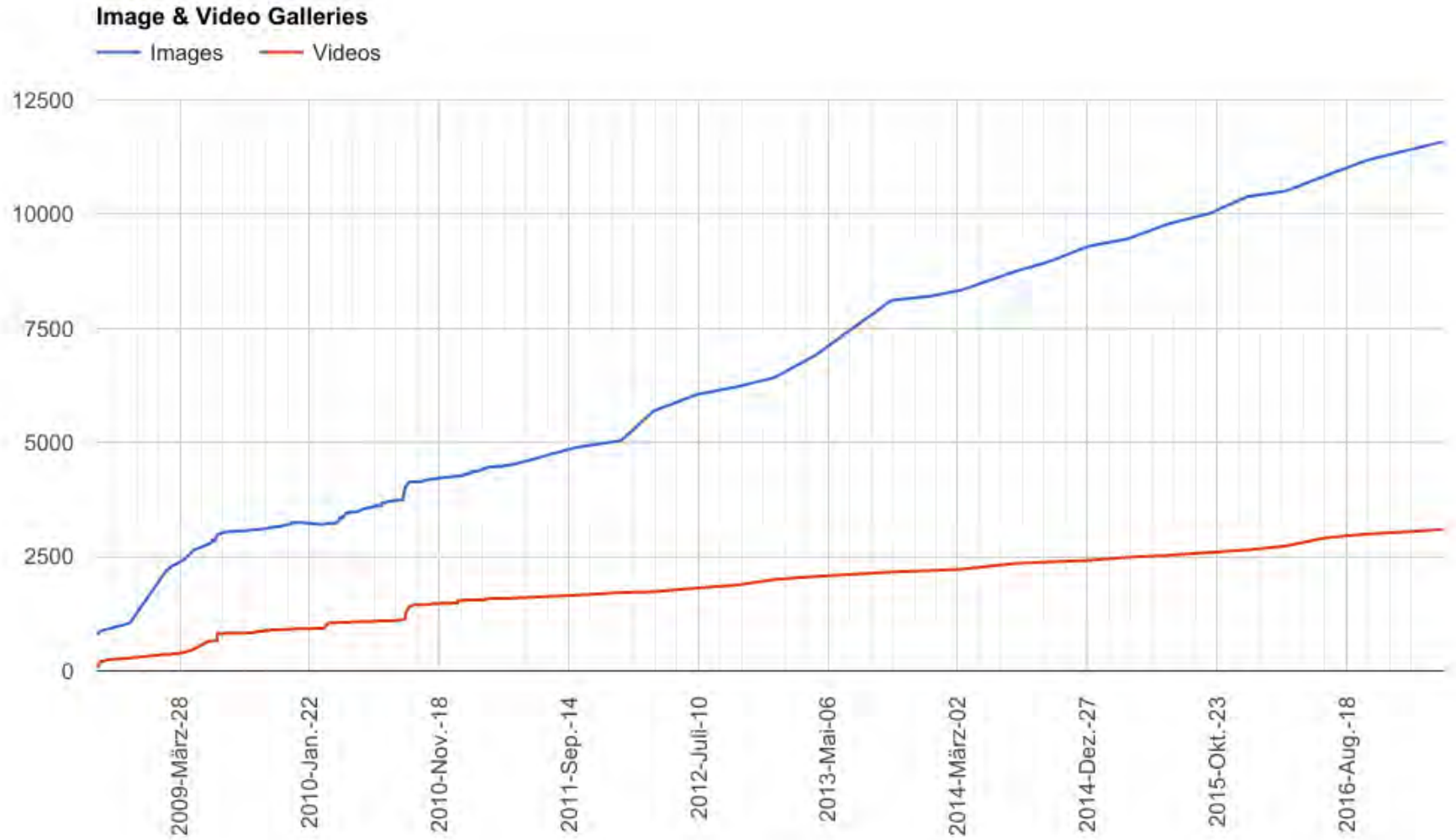


Image & Video Galleries
Images
Videos
12500
10000
7500
5000
2500
0
2009-März-28
2010-Jan.-22
2010-Nov.-18
2011-Sep.-14
2012-Juli-10
2013-Mai-06
2014-März-02
2014-Dez.-27
2015-Okt.-23
2016-Aug.-18

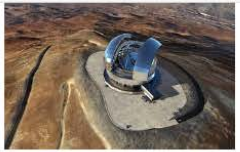
European Southern Observatory

ESO1711 — PHOTO RELEASE

ALMA Captures Dramatic Stellar Fireworks

ANNOUNCEMENTS

6 April 2017 — ann17018
ESO Engineer Wins 2017 Tycho Brah



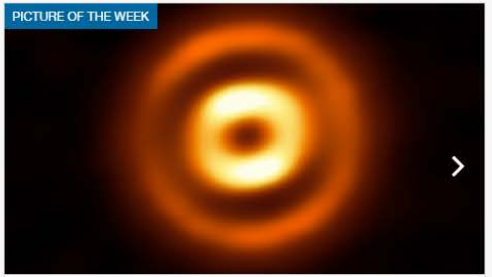
5 April 2017 — ann17017
Media Advisory: Extremely Large Tele

4 April 2017 — ann17016
Apply Now for the Summer AstroCam

31 March 2017 — ann17015
Attempting the Impossible: Taking the

ESOCAST

PICTURE OF THE WEEK



European Southern Observatory

Images

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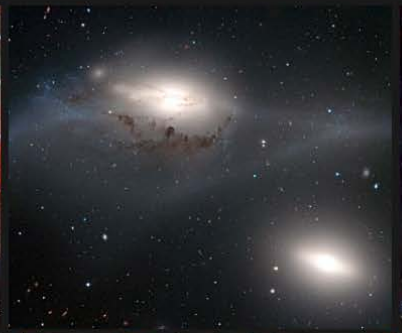
Sort by: Ranking Date








European Southern Observatory

Videos

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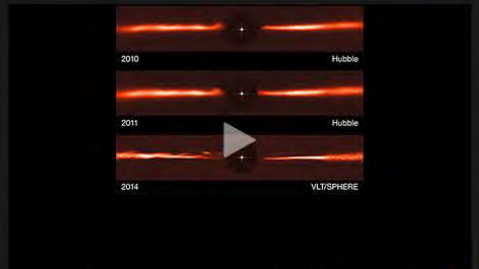
Sort by: Ranking | Date

ESOcast 78: Airglow



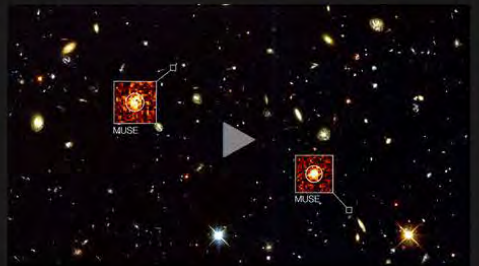
ESOcast 77: Mysterious Ripples Found Racing Through Planet-forming Di

ESOcast 76: A Polarised View of Stellar Magnetism

ESOcast 75: ESO's Top 10 Discoveries

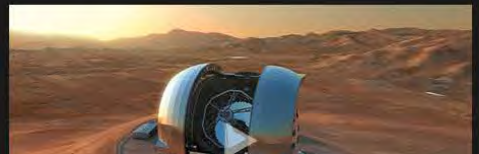
ESOcast 74: Mapping the Southern Skies

ESOcast 73: Your ESO Pictures



ESOcast 72 – Looking Deeply into the Universe in 3D

ESOcast 71: New Exoplanet-hunting Telescopes on Paranal



European Southern Observatory

New Technology Telescope

Djangoplicity Admin

The 3.58-metre New Technology Telescope (NTT) was inaugurated in 1989. It broke new ground for telescope engineering and design and was the first in the world to have a computer-controlled main mirror.

The main mirror is flexible and its shape is actively adjusted during observations by actuators to preserve the optimal image quality. The secondary mirror position is also actively controlled in three directions.

This technology, developed by ESO, known as active optics, is now applied to all major modern telescopes, such as the Very Large Telescope at Cerro Paranal and the future European Extremely Large Telescope.

The design of the octagonal enclosure housing the NTT is another technological breakthrough. The telescope dome is relatively small, and is ventilated by a system of flaps that makes air flow smoothly across the mirror, reducing turbulence and leading to sharper images.

Science goals

Star formation, protoplanetary systems, Galactic center, spectroscopy.

Links

- **For scientists:** More details can be found on the telescope page.

NTT

Name:	New Technology Telescope
Site:	La Silla
Altitude:	2375 m
Enclosure:	Compact optimised enclosure
Type:	Optical & near-infrared telescope
Optical design:	Ritchey-Chrétien reflector
Diameter. Primary M1:	3.58 m
Material. Primary M1:	ZeroDur Schott
Diameter. Secondary M2:	0.875 m
Material. Secondary M2:	ZeroDur Schott
Diameter. Tertiary	0.84 m X 0.60 m (elliptical)

European Southern Observatory

Djangoplicity Admin

EFOSC2

ESO Faint Object Spectrograph and Camera 2

The instrument EFOSC2, or the ESO Faint Object Spectrograph and Camera version 2, was created for one thing: versatility. Like its predecessor, EFOSC, a robust and multi-purpose instrument at ESO's 3.6-metre telescope at La Silla Observatory (now decommissioned), EFOSC2 was could work in any of eight different modes with a strong performance.

When the EFOSC series was conceived, removing an instrument was not an easy task (and still isn't!). It takes time, manpower, the need to plug in and unplug hundreds of cables, and most importantly, there is no room for error, otherwise precious observting time is wasted. EFOSC2 was designed with this problem in mind. It is an imager and spectrograph for faint objects, or in a simple terms, a device that photographs and analyses the light of the cosmos in multiple ways,and an upgraded version of EFOSC that avoids the necessity of having to add or remove pieces from the instrument.

As Claus Madsen explains in his book, The Jewel on the Mountaintop, Daniel Enard's design for EFOSC became the model when building a similar type of instrument elsewhere, and the optical design by Bernard Delabre, another of the ESOs unsung heroes, has become a standard for many of the instruments at ESO and in several other observatories.

In addition to being able to take normal images of the sky, EFOSC2 can be converted into a spectrograph simply by rotating a few wheels. It is then able to split the light from the stars into their individual colours for detailed analysis. EFOSC2 can also be converted into a coronagraph (to observe faint details next to a bright stars without being blinded by the star's glare), and a polarimeter (which measures the polarisation of the light from the stars). That's not all: EFOCS2 can morph itself into a multiple object spectrograph (to observe several objects simultaneously), or into a spectropolarimeter (to measure the polarisation as a function of the wavelength). The transformation takes only a few seconds.

EFOSC2 saw first light on the New Technology Telescope on 11 May 1989, which makes it a long-term companion of ESO. It was successful from the beginning, making the first catalogue of narrowband images of planetary nebulae (Schwarz et al., 1992) still one of most popular works for astronomers!

Once the EMMI instrument (decommissioned) arrived at the NTT in 1990, EFOSC2 was moved to the MPG/ESO 2.2-metre telescope. There, it has contributed a series of new observations, for example in the field of comets, such as Hale-Bopp (eso9726).

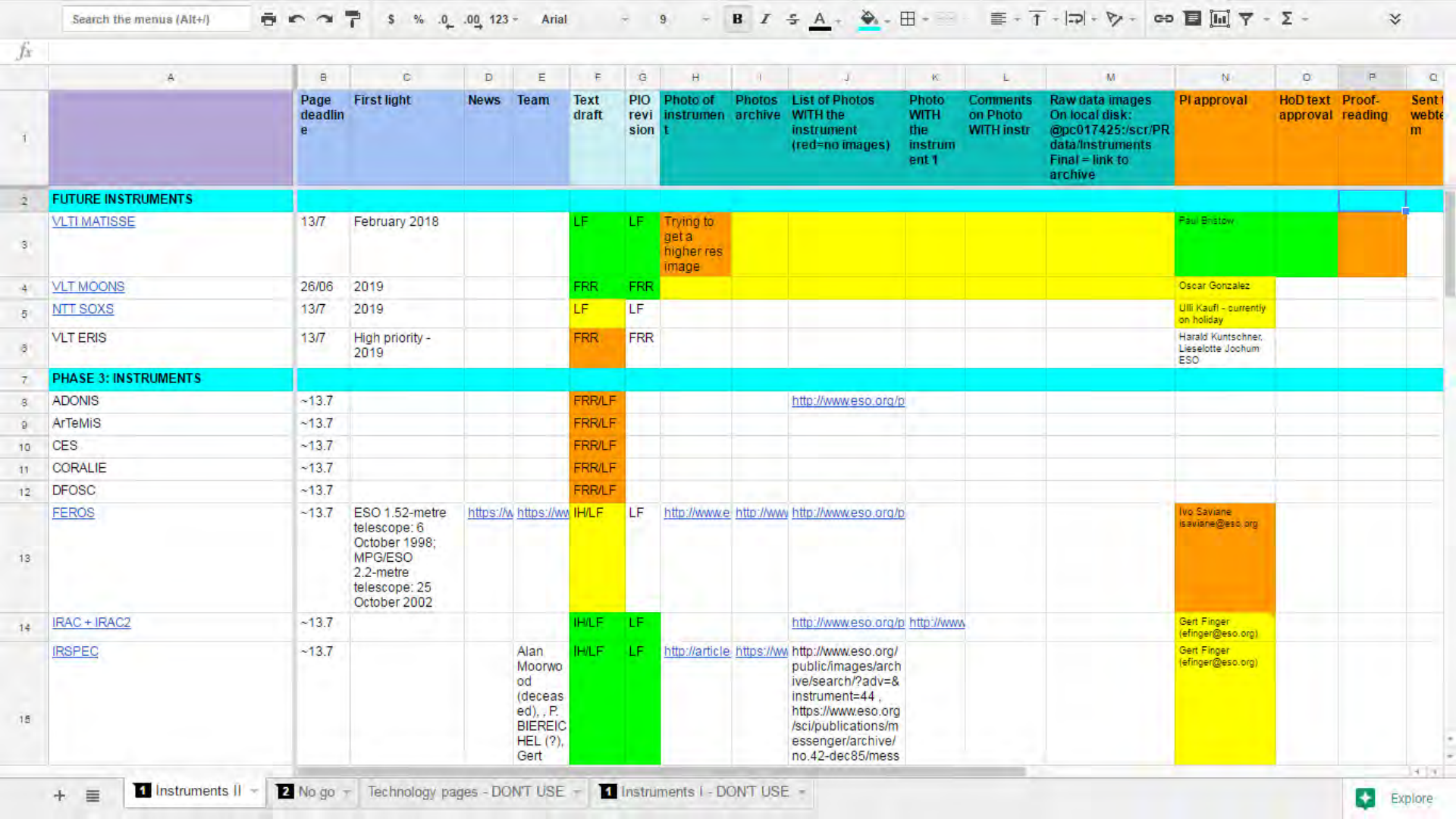
In October 1997, like a family-run business, EFOSC2 replaced EFOSC after ten years of service at the ESO 3.6-metre telescope. Some scientific highlights during that period include work on dark matter in galaxy clusters (eso0419) and also optical studies of supernovae associated with gamma-ray bursts (Levan et al., 2005).

In 2008, and for the fourth time, EFOSC2 was moved once again. This time it went back to the New Technology Telescope after the decommissioning of EMMI. A team was created to update EFOSC2 and give it a new lease of life. As the team explained in an article of The Messenger, the main reasons for the longevity and reliability of EFOSC2 are down to: *"the fact that its design is relatively simple, and yet it offers many observing modes and is highly versatile"*.

EFOSC2

The authoritative technical specifications as offered for astronomical observations are available from the Science Operation page.

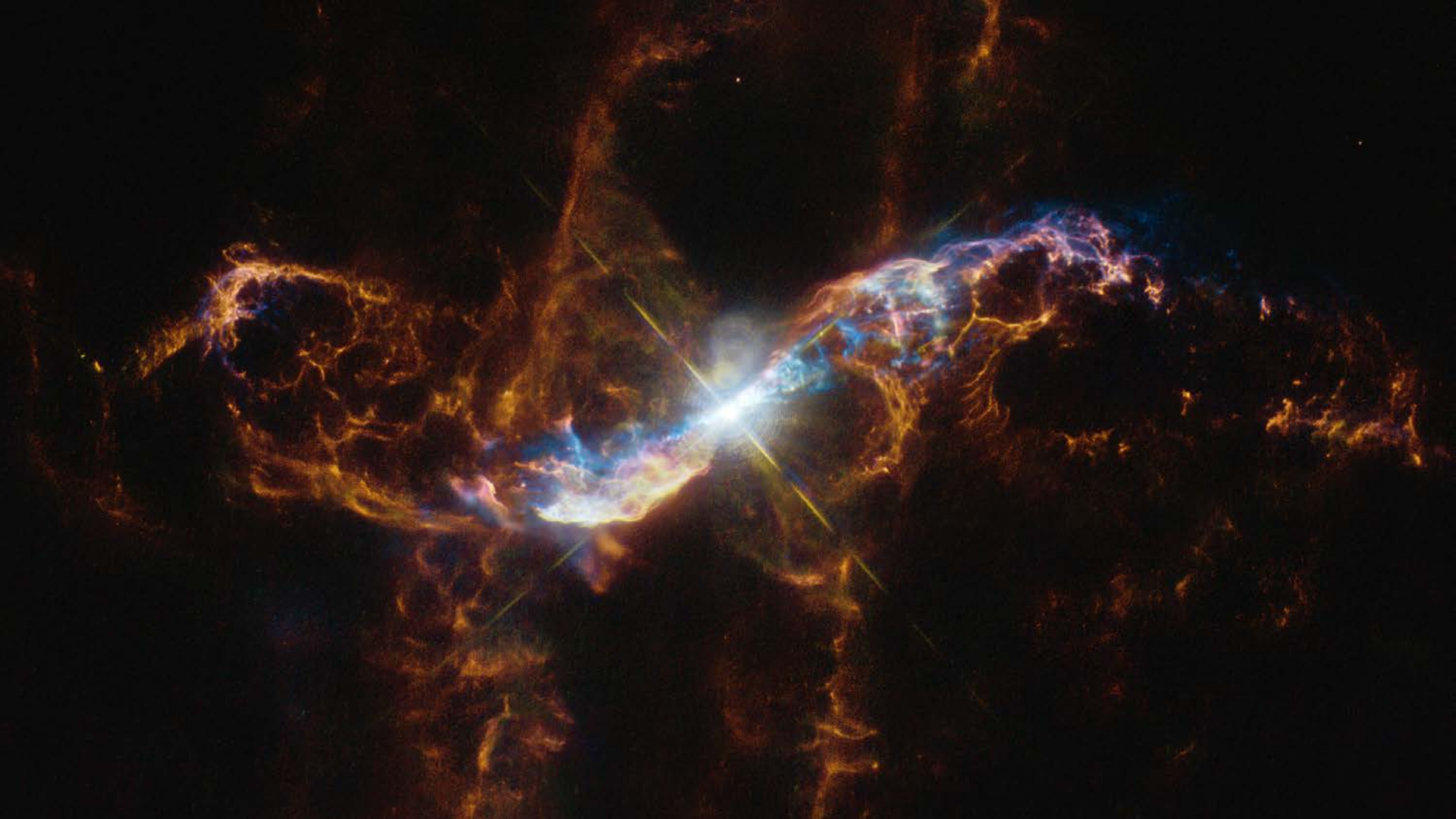
Name:	ESO Faint Object Spectrograph and Camera 2
Site:	La Silla
Telescope:	New Technology Telescope
Focus:	Nasmyth
Type:	Imager and spectrograph
Wavelength coverage:	305 nm and 1100 nm
Spatial resolution:	4.1 arcminutes x .4.1 arcminutes
Spectral resolution:	
First light date:	11 May 1989
Images taken with the instrument:	Link
Images of the instrument:	Link
Science goals:	Direct imaging, long slit spectroscopy, slitless spectroscopy, echelle spectroscopy, imaging polarimetry, spectropolarimetry, coronography, and Multiple Object Spectroscopy (MOS)
Consortium:	EFOSC2 were built in-house by



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1		Page deadline	First light	News	Team	Text draft	PIO revision	Photo of instrument	Photos archive	List of Photos WITH the instrument (red=no images)	Photo WITH the instrument 1	Comments on Photo WITH instr	Raw data images On local disk: @pc017425:/scr/PR data/Instruments Final = link to archive	PI approval	HoD text approval	Proof-reading	Sent to webte m
2	FUTURE INSTRUMENTS																
3	VLTI MATISSE	13/7	February 2018			LF	LF	Trying to get a higher res image						Paul Bristow			
4	VLT MOONS	26/06	2019			FRR	FRR							Oscar Gonzalez			
5	NTT SOXS	13/7	2019			LF	LF							Ulli Kaufl - currently on holiday			
6	VLT ERIS	13/7	High priority - 2019			FRR	FRR							Harald Kuntschner, Lieselotte Jochum ESO			
7	PHASE 3: INSTRUMENTS																
8	ADONIS	~13.7				FRR/LF				http://www.eso.org/p							
9	ArTeMiS	~13.7				FRR/LF											
10	CES	~13.7				FRR/LF											
11	CORALIE	~13.7				FRR/LF											
12	DFOSC	~13.7				FRR/LF											
13	FEROS	~13.7	ESO 1.52-metre telescope: 6 October 1998; MPG/ESO 2.2-metre telescope: 25 October 2002	https://w	https://ww	IH/LF	LF	http://www.e	http://www	http://www.eso.org/p				Ivo Saviane isaviane@eso.org			
14	IRAC + IRAC2	~13.7				IH/LF	LF			http://www.eso.org/p	http://www			Gert Finger (efinger@eso.org)			
15	IRSPEC	~13.7			Alan Moorwood (deceased), , P. BIEREICHEL (?), Gert	IH/LF	LF	http://article	https://ww	http://www.eso.org/public/images/archive/search/?adv=&instrument=44 , https://www.eso.org/sci/publications/messenger/archive/no.42-dec85/mess				Gert Finger (efinger@eso.org)			

Instruments II | No go | Technology pages - DON'T USE | Instruments I - DON'T USE


ESO



European Southern Observatory

Cosmic Gems

ESO holds a leading position in astronomy education and outreach, partly thanks to the steady production of stunning, high quality astronomical pictures. The current standard of quality of the images and the publication rate, together with the current promotion strategy and the promotion of incredible scientific results, have led to a steady increase in ESO's visibility, and enhanced public awareness of ESO's highly competent armada of astronomical facilities.

The majority of the published pictures are based on the content of ESO's Science Archive, where data collected by the organisation's telescopes are stored. However, ESO telescopes are scientific instruments, so most of the data that they produce are not suitable for the purposes of making colour images. Astronomers at ESO's education and Public Outreach Department (ePOD) have systematically searched the Science Archive, and most of the datasets that could be used for producing colour images have now been published in our online gallery of images.

To keep up the current flow of spectacular astronomical images, periodically released as Photo Releases and Pictures of the Week, ePOD has decided to launch a new initiative: the Cosmic Gems Programme. This is aimed at obtaining images with the ESO telescopes for the purposes of education and public outreach, and will allow ESO to maintain its world-leading position in this field.

This is a similar strategy to that adopted by the very successful Heritage programme, which has been acquiring spectacular high quality outreach images from the Hubble Space Telescope since 1997.

VLT looks into The Eyes of the Virgin

IC 2944, Nicknamed the Running Chicken

The Smoky Pink Core of the Omega

The Te

The Cosmic Gems team consists of outreach and imaging specialists, scientists and members of ESO's Operations team:

Olivier Hainaut, ePOD, project coordinator

Henri Boffin, operations

Lars Lindberg Christensen, ePOD

Richard Hook, ePOD

Ivo Saviane, Paranal Science Operation

Martin Kornmesser, ePOD, post production

Oleh Malyi, FITS data processing

Davide de Martin, dynamic range optimization

Adil Hussein, cosmetic cleaning

Level of communication, general

- The level of communication for a given item should correspond to its newsworthiness and importance
- Segregate the news communication products into the necessary layers and label them clearly
- Describe your communication strategy openly

The Press Release Visibility Scale	
Magnitude 7:	Live televised press conference with presence of a high ranking political figure
Magnitude 6:	Live televised press conference
Magnitude 5:	Press conference
Magnitude 4:	Media teleconference
Magnitude 3:	Press release
Magnitude 2:	Photo release
Magnitude 1:	Web-only posting

Level of communication, ESO

- Levels:

1. Live press conference
2. Media telecon
3. Science or Organisation press release
4. Photo release
5. Local, national press release
6. Announcement (web-only + delayed email newsletter distribution)
7. (Blog)
8. **Picture of the Week**
9. Social media only (Facebook & Twitter)
10. Include in background material (web texts, multimedia gallery)

- ~45 Press releases,~100 announcements, ~52 Pictures of the Week/year
- Releases supported with extensive images, illustrations, and HD video
- Strategy described on a public page: ESO's press room

potw1545 — Picture of the Week

Infant Star's First Steps

9 November 2015: The power of the Atacama Large Millimeter/submillimeter Array (ALMA) reveals two immense, rippled jets of dense gas with near-perfect symmetry emanating from a single source at the centre of this image. At their origin lies an extremely young star — called a protostar — that is beginning the long journey to becoming a star much like the Sun. The infant star, known as CARMA-7, and its jets are located approximately 1400 light-years from Earth within the

READ MORE

potw1544 — Picture of the Week

Sunset Panorama at La Silla

2 November 2015: This majestic panorama gives context to ESO's La Silla Observatory. The site is positioned 2400 metres above sea level in the southern outskirts of Chile's Atacama Desert. Far from the light pollution of civilisation it provides a clear view of the night sky for ESO's telescopes. La Silla has been an ESO stronghold since the 1960s with only a selection of ESO's telescopes visible in this image: The ESO 1-metre Schmidt telescope, the ESO 1-metre telescope and the ESO 1.52-metre

READ MORE

potw1543 — Picture of the Week

Planet-hunting SPHERE Images First Circumbinary Planet System with Disc

26 October 2015: Observations by ESO's planet-finding instrument, SPHERE, a high-contrast adaptive optics system installed on the third Unit Telescope of ESO's Very Large Telescope, have revealed the edge-on disc of gas and dust present around the binary star system HD 106906AB. HD 106906AB is a double star located in the constellation of Crux (The Southern Cross). Astronomers had long suspected that this 13 million-

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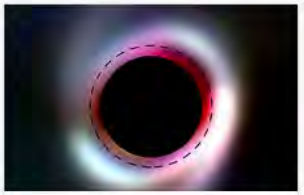


potw1542 — Picture of the Week

SPHERE Reveals Spiral Disc Around Nearby Star

19 October 2015: ESO's SPHERE, a planet-hunting instrument installed on the Very Large Telescope in Chile, has uncovered an unusual structure around a nearby adolescent star named HD 100453. HD 100453 lies over 350 light-years away in the constellation of Centaurus (The Centaur), and is engulfed by a swirling disc of gas and dust, visible in red and white in this image. Tantalisingly, two faint spiral arms can be seen extending from

READ MORE

potw1541 — Picture of the Week

Outbursts from a newborn star

12 October 2015: A pair of jets

potw1540 — Picture of the Week

A Microlensing Mystery

5 October 2015: This spectacular starry field of view shows the

potw1539 — Picture of the Week

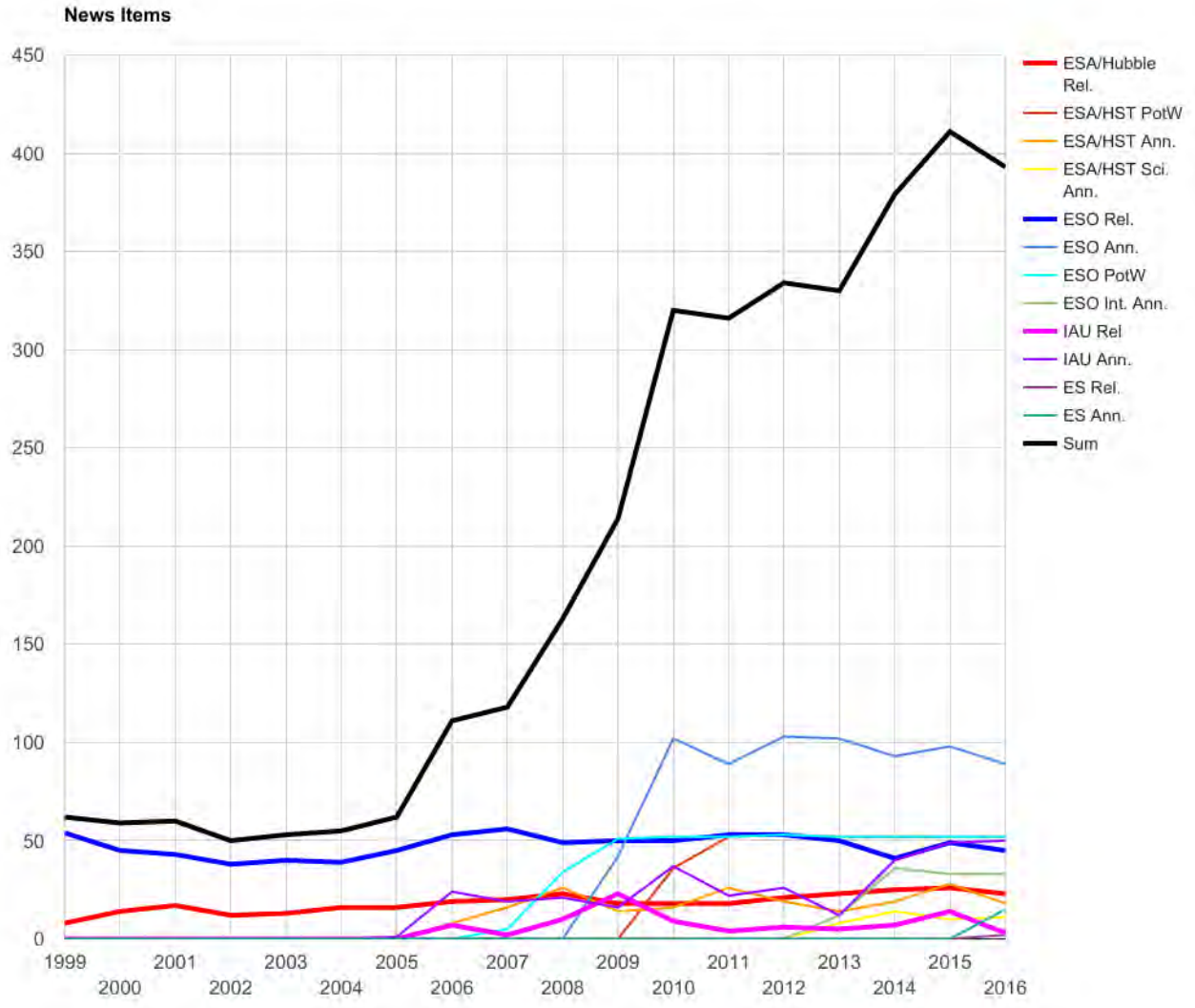
Total Lunar Eclipse over ESO Headquarters

28 September 2015: On the

potw1538 — Picture of the Week

Keeping cool at La Silla

21 September 2015: This striking picture of the New Technology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ESA/HST PotW
ESA/HST Ann.
ESA/HST Sci. Ann.
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ES Rel.
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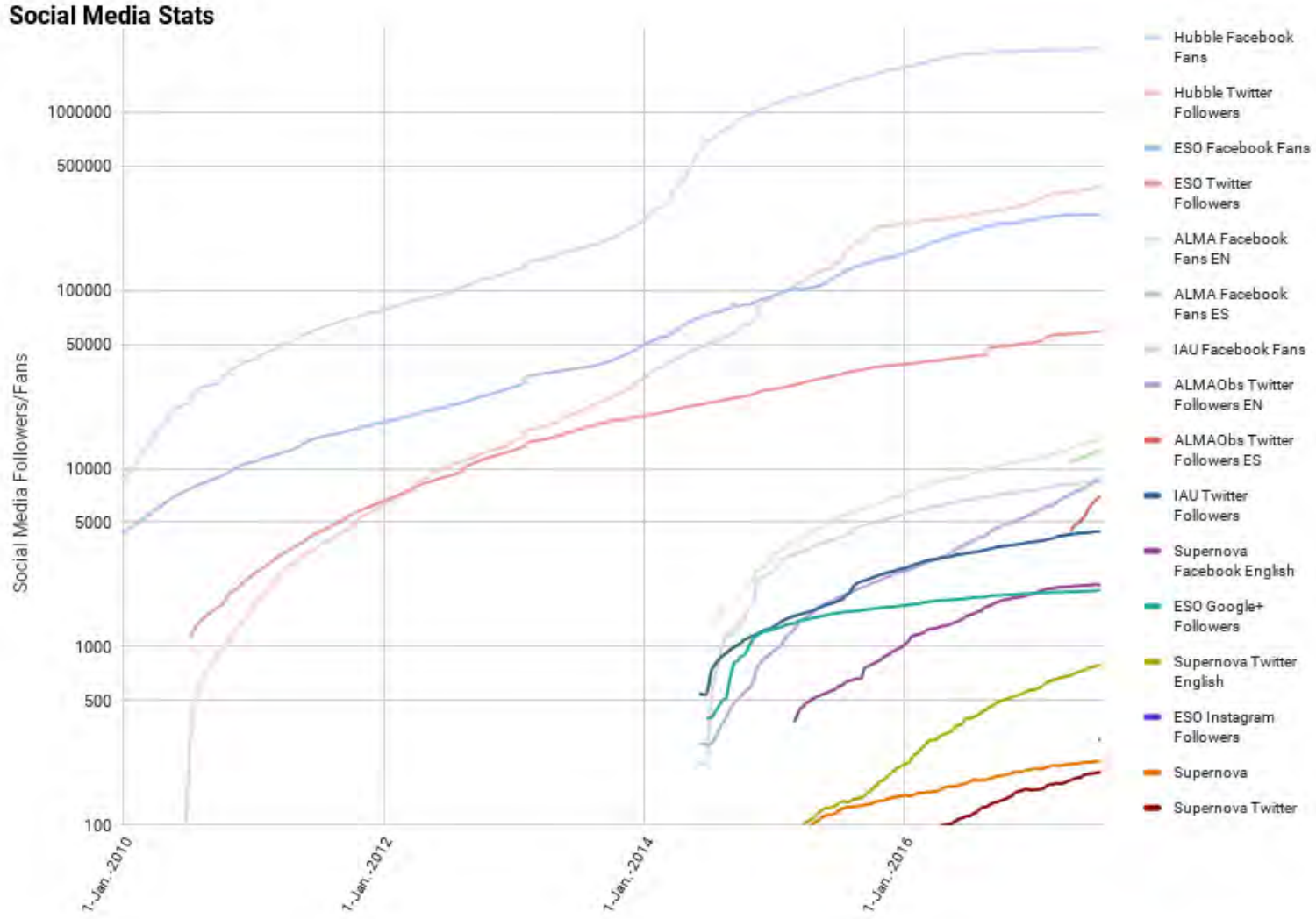
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ESO Facebook Fans
ESO Twitter Followers
ALMA Facebook Fans EN
ALMA Facebook Fans ES
IAU Facebook Fans
ALMAObs Twitter Followers EN
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ESO Google+ Followers
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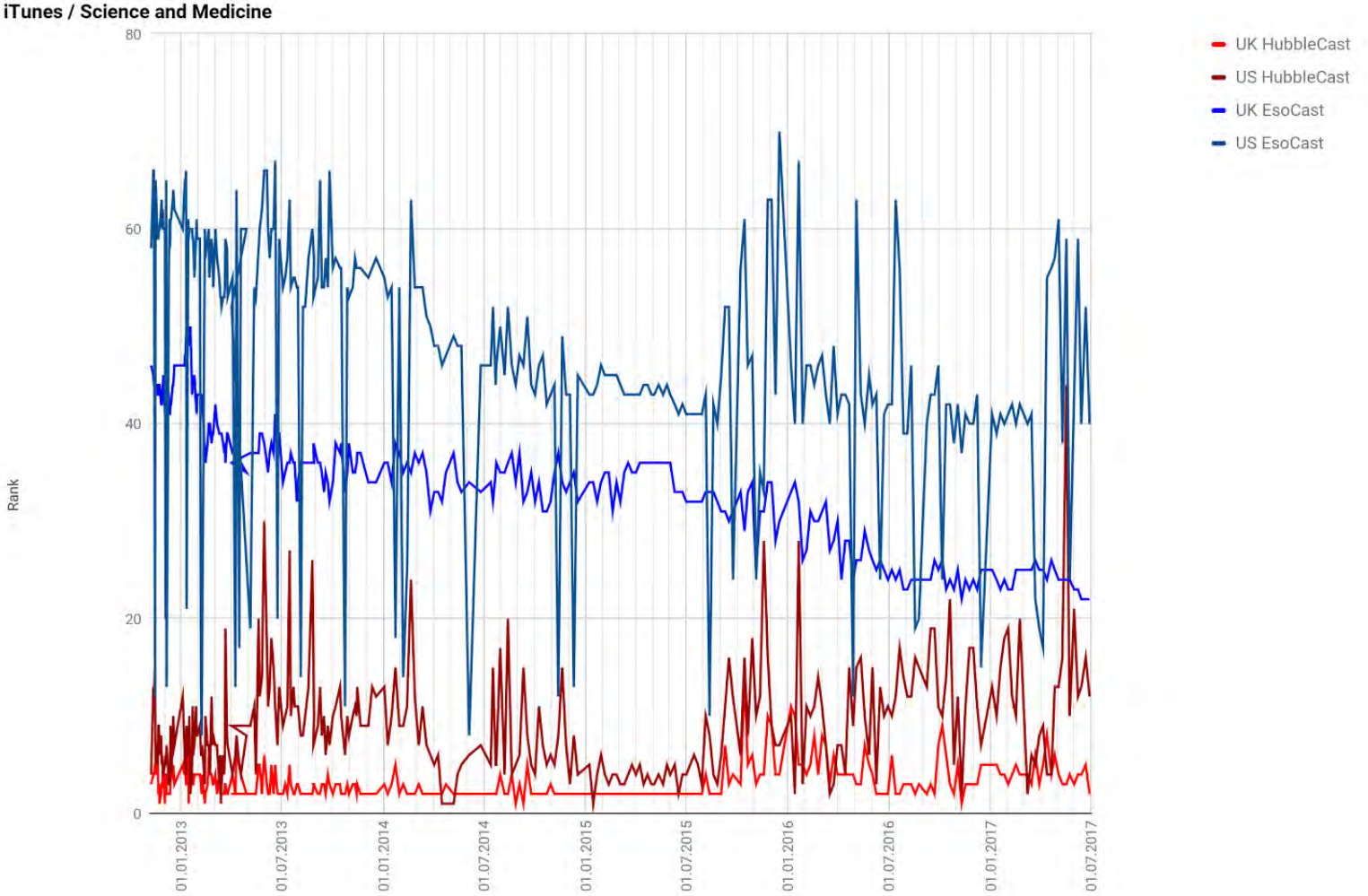
iTunes / Science and Medicine
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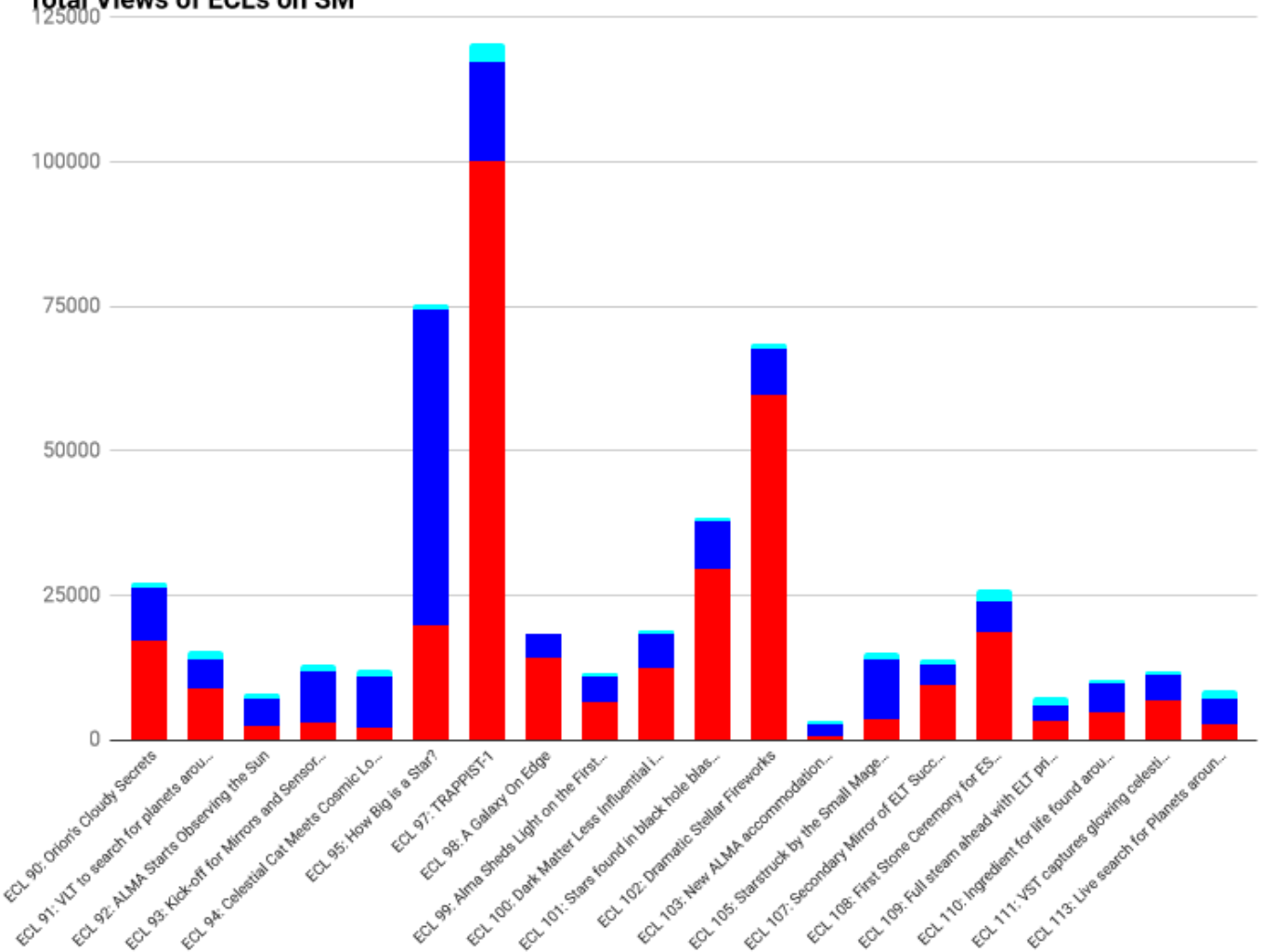
Total Views of ECLs on SM
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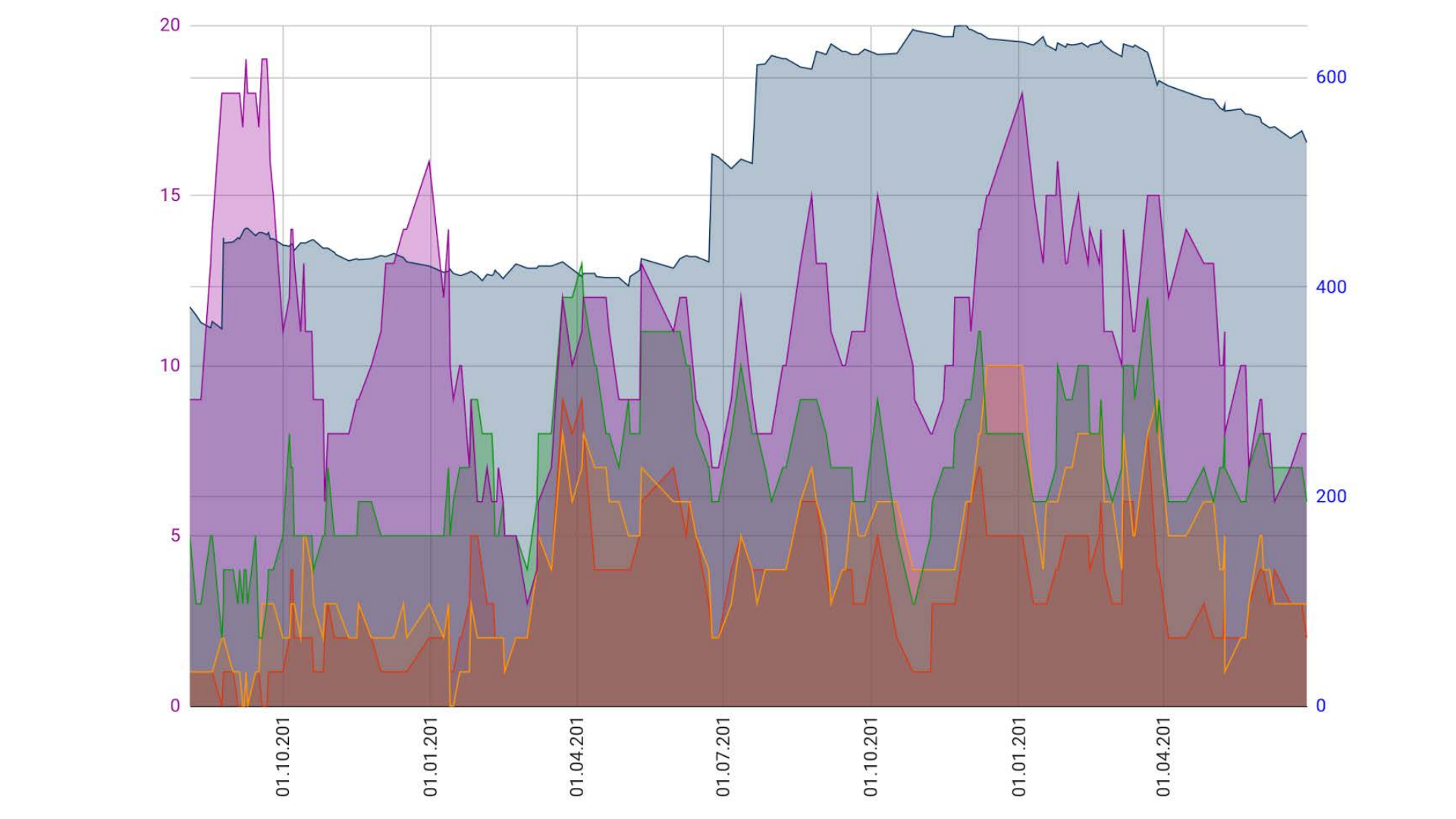
ECL 90: Orion's Cloudy Secrets
ECL 91: VLT to search for planets arou...
ECL 92: ALMA Starts Observing the Sun
ECL 93: Kick-off for Mirrors and Sensor...
ECL 94: Celestial Cat Meets Cosmic Lo...
ECL 95: How Big is a Star?
ECL 97: TRAPPIST-1
ECL 98: A Galaxy On Edge
ECL 99: Alma Sheds Light on the First...
ECL 100: Dark Matter Less Influential i...
ECL 101: Stars found in black hole blas...
ECL 102: Dramatic Stellar Fireworks
ECL 103: New ALMA accommodation...
ECL 105: Starstruck by the Small Mage...
ECL 107: Secondary Mirror of ELT Succ...
ECL 108: First Stone Ceremony for ES...
ECL 109: Full steam ahead with ELT pri...
ECL 110: Ingredient for life found arou...
ECL 111: VST captures glowing celesti...
ECL 113: Live search for Planets aroun...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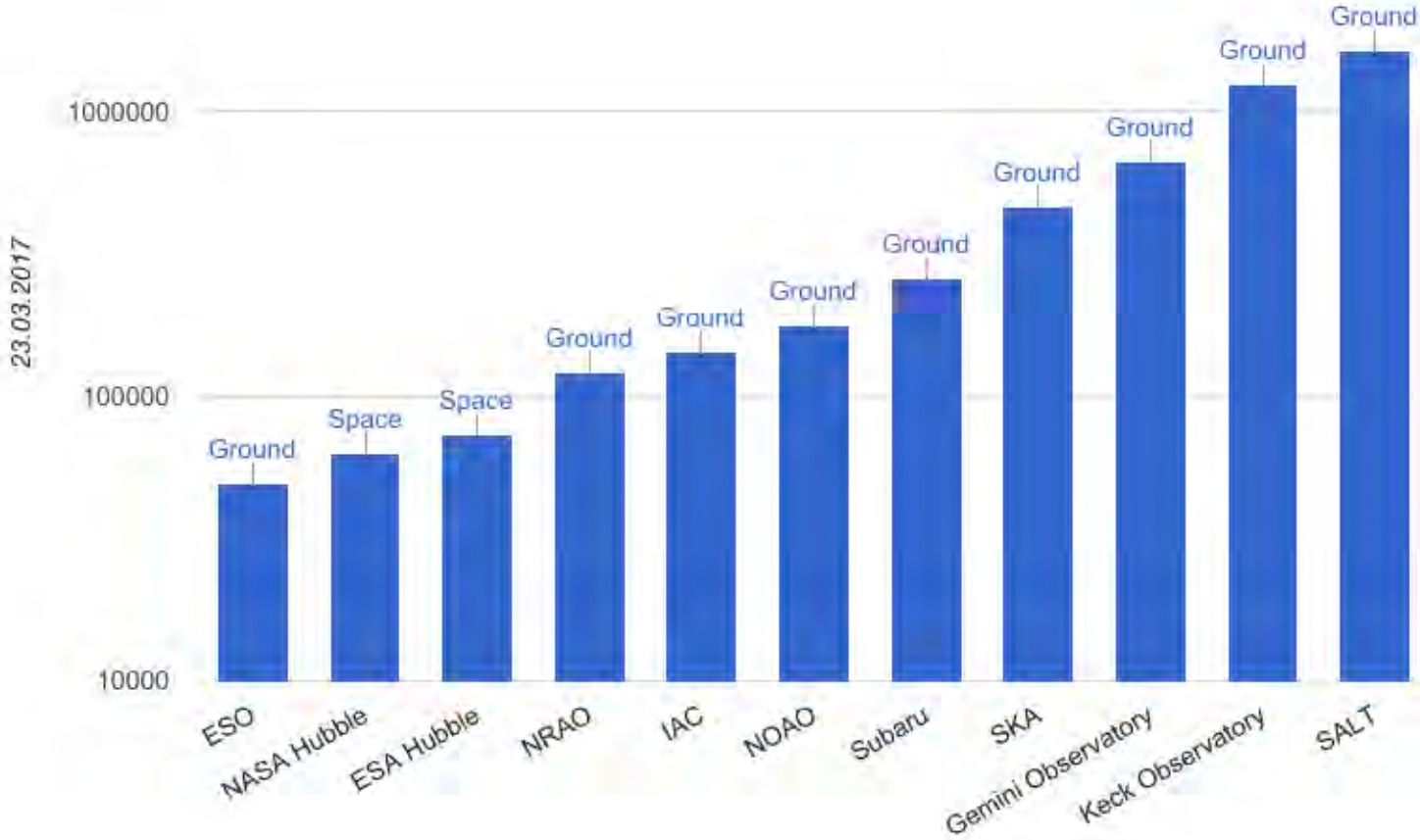

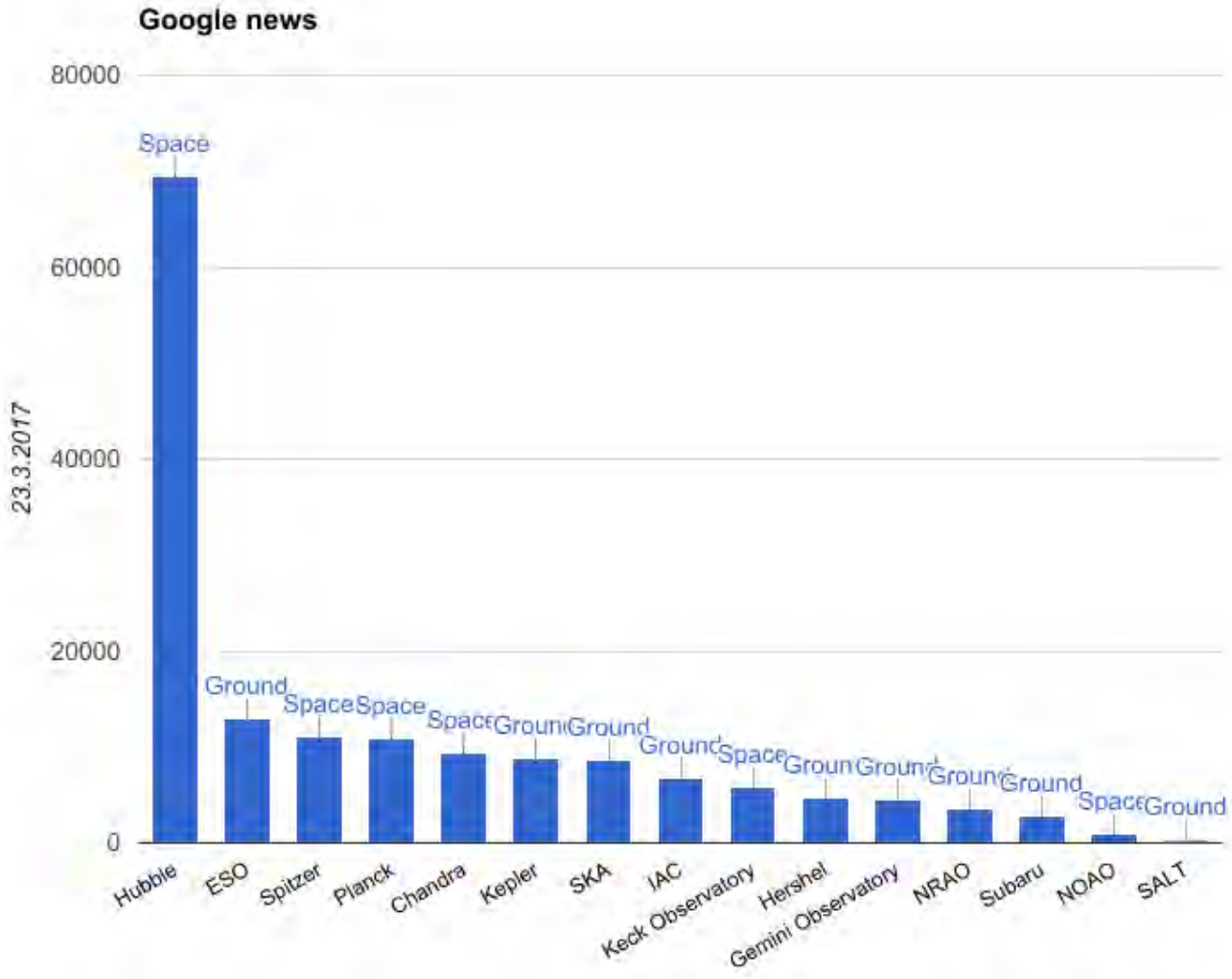
Google news
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23.3.2017
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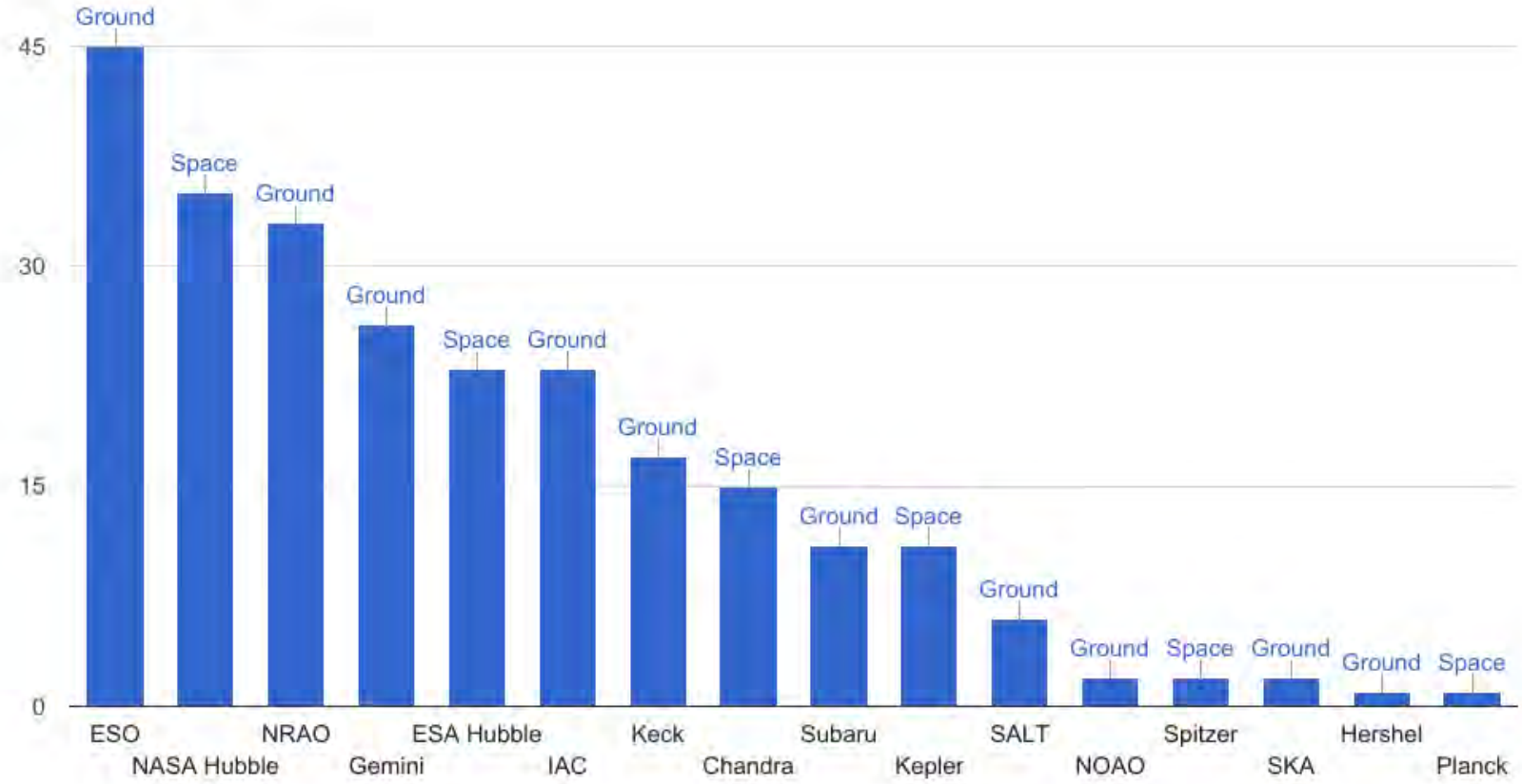
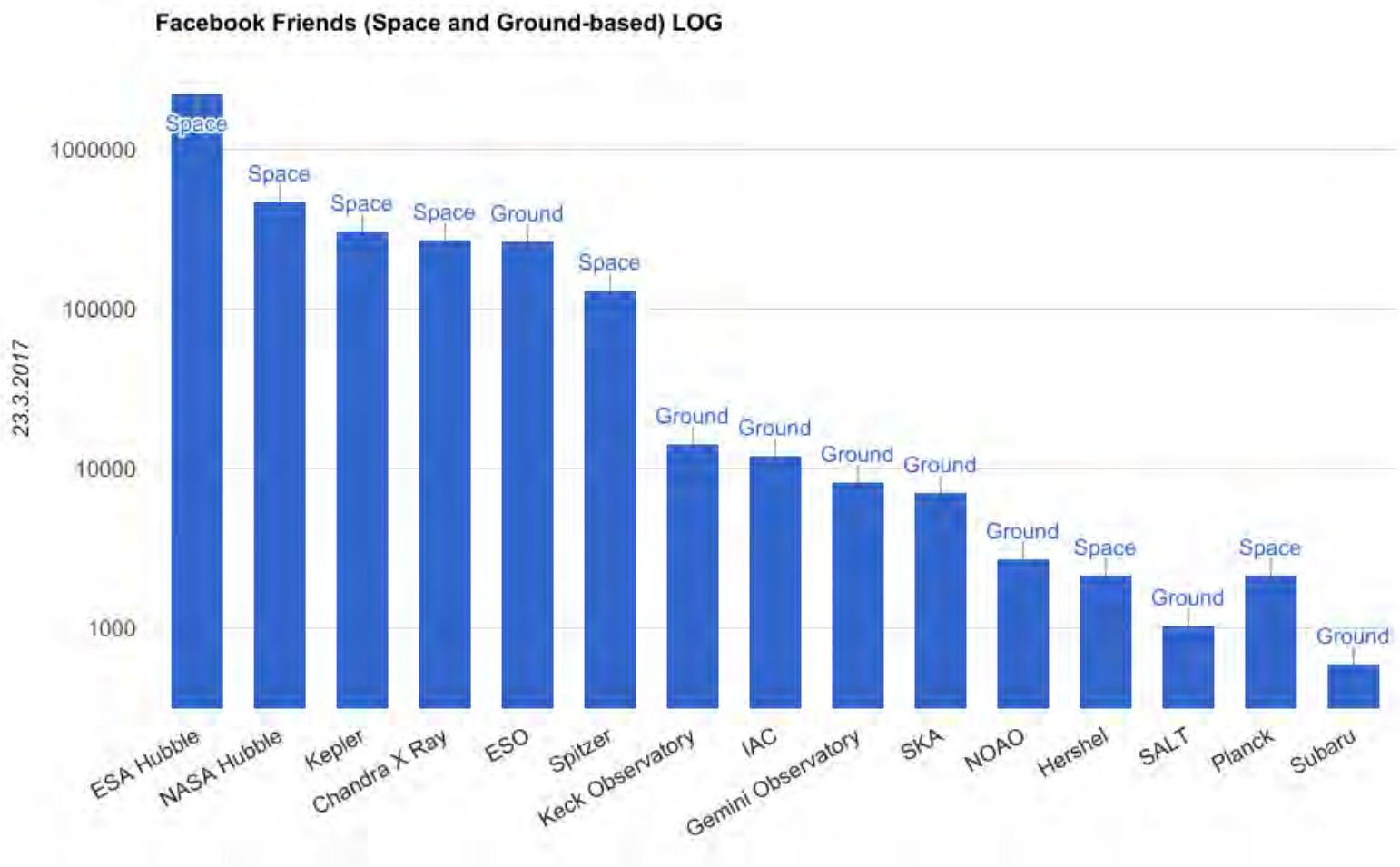
Keck Observatory
Hershel
Gemini Observatory
NRAO
Subaru
NOAO
SALT

Press releases 2016

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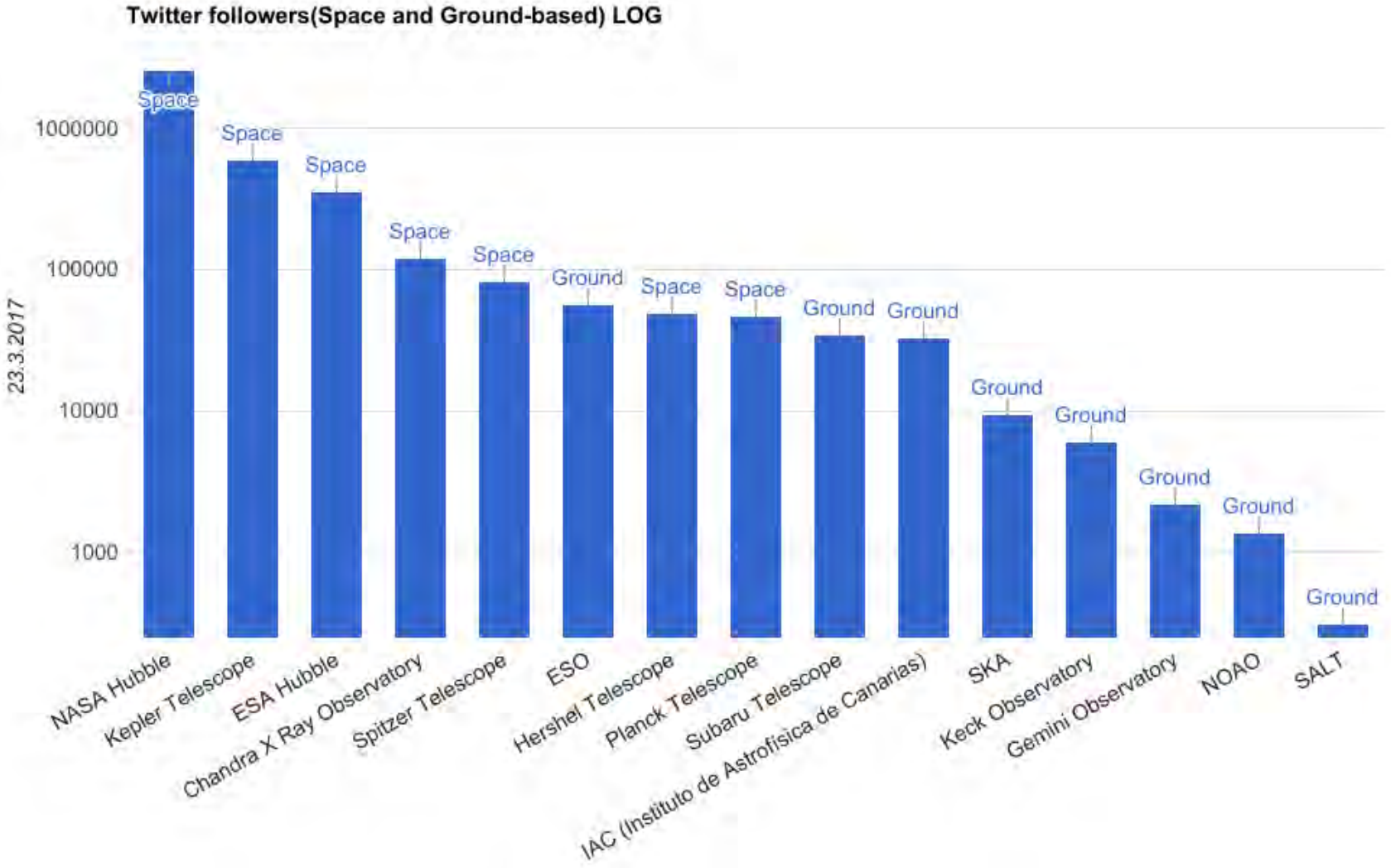
NASA Hubble
Kepler
Chandra X Ray
ESO
Spitzer
Keck Observatory
IAC
Gemini Observatory
SKA
NOAO
Hershel
SALT
Planck
Subaru


Twitter followers(Space and Ground-based) LOG
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ESA Hubble
Chandra X Ray Observatory
Spitzer Telescope
ESO
Hershel Telescope
Planck Telescope
Subaru Telescope
IAC (Instituto de Astrofisica de Canarias)
SKA
Keck Observatory
Gemini Observatory
NOAO
SALT

Some key figures relating to ESO's outreach activities in 2016

82 media visits
Several hundreds of millions reached via traditional media (esp. From media visits)
122 interview requests
135 million+ reached via social media on ESO's main English accounts alone
56 million+ reached via social media on ESO's translated accounts
693 500 reached via social media on ESO Supernova English and German accounts
253 170 Facebook friends
51 469 Twitter followers
39 100 individual social media posts on 60 channels in 18 languages
27 ESON Countries
52 print products
11 408 images total (image archive)
3048 videos total (video archive)
8244 weekend visitors
45 443 Newsletter subscribers
27 383 contact addresses
306 distribution tickets resolved
1400 ESOshop orders sent
2200 web content tickets resolved

Change contact

Label History

ID: 3616 Created: 28 July 2011, 12:48 Last modified: 18 December 2012, 17:36

Person

Title: Dr. First name: Thierry Last name: Botti

Position: Responsable de la communication

Address

Organisation: Observatoire Astronomique Marseille

Department: Pôle de l'Etoile Site de Château-Gomb

Street 1: 38, rue Frédéric Joliot-Curie

Street 2:

City: F-13388 Marseille Cedex 13

Including postal code, city and state.

Country: France

Groups

Hold down "Control", or "Command" on a Mac, to select more than one.

Groups:

Available groups

Filter

Ambassador: Guide
CAPjournal_e
Duplicate
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Import ePOD google and Skype at 2012-12
Import epodbroadcasters at 2012-02-10 16
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Import epodpress at 2012-12-03 11:14:31
Import ESO@50 at 2012-09-11 13:39:23
Import Former Employee at 2012-12-05 11
Import Former fellow at 2013-01-16 13:37:
Import Incoming media visits requests for

Choose all

Chosen groups

KOL: LLC
Ambassador: ESON
Outreach: PIO
Product: CAP Journal
Event
Outreach_e
eson_e
epodpress_e

Remove all

Contact

Email: thierry.botti@oamp.fr

Site administration

Announcements		
Announcement Types	Add	Change
Announcement translations	Add	Change
Announcements	Add	Change
Web update types	Add	Change
Web updates	Add	Change

Authentication and Authorization		
Groups	Add	Change
Users	Add	Change

Contacts		
Contact group actions	Add	Change
Contact groups	Add	Change
Contacts	Add	Change
Countries	Add	Change
Country groups	Add	Change
Deduplications	Add	Change
Fields	Add	Change
Group categories	Add	Change
Import mappings	Add	Change
Import templates	Add	Change
Imports	Add	Change
Labels	Add	Change
Postal zones	Add	Change

Crawler		
Urls	Add	Change

Customsearch		
Custom search conditions	Add	Change
Custom search groups	Add	Change
Custom search layouts	Add	Change
Custom search models	Add	Change
Custom searches	Add	Change

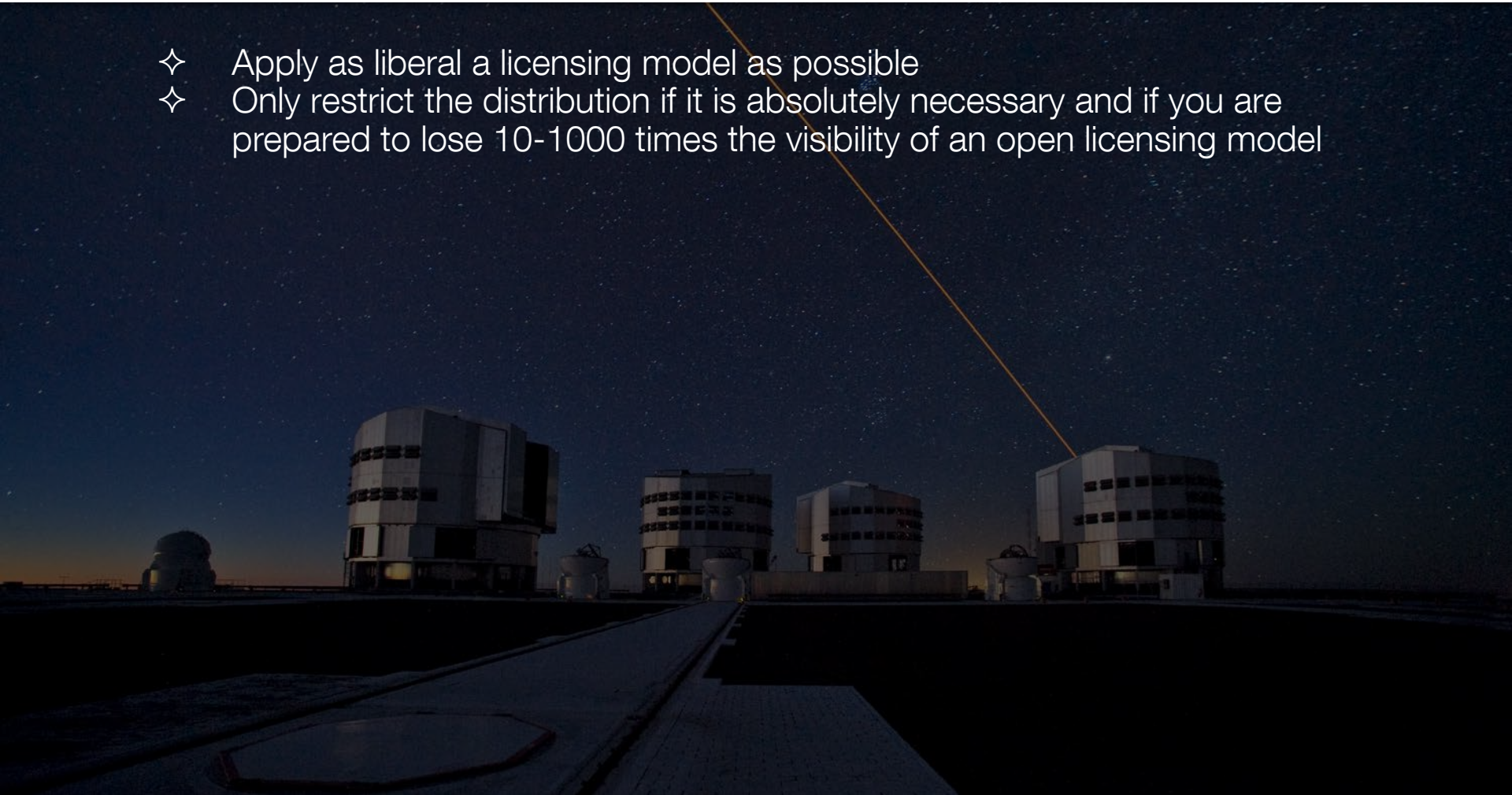
Eventcalendar		
Event countries	Add	Change
Event types	Add	Change
Event types translations	Add	Change

Recent Actions

My Actions

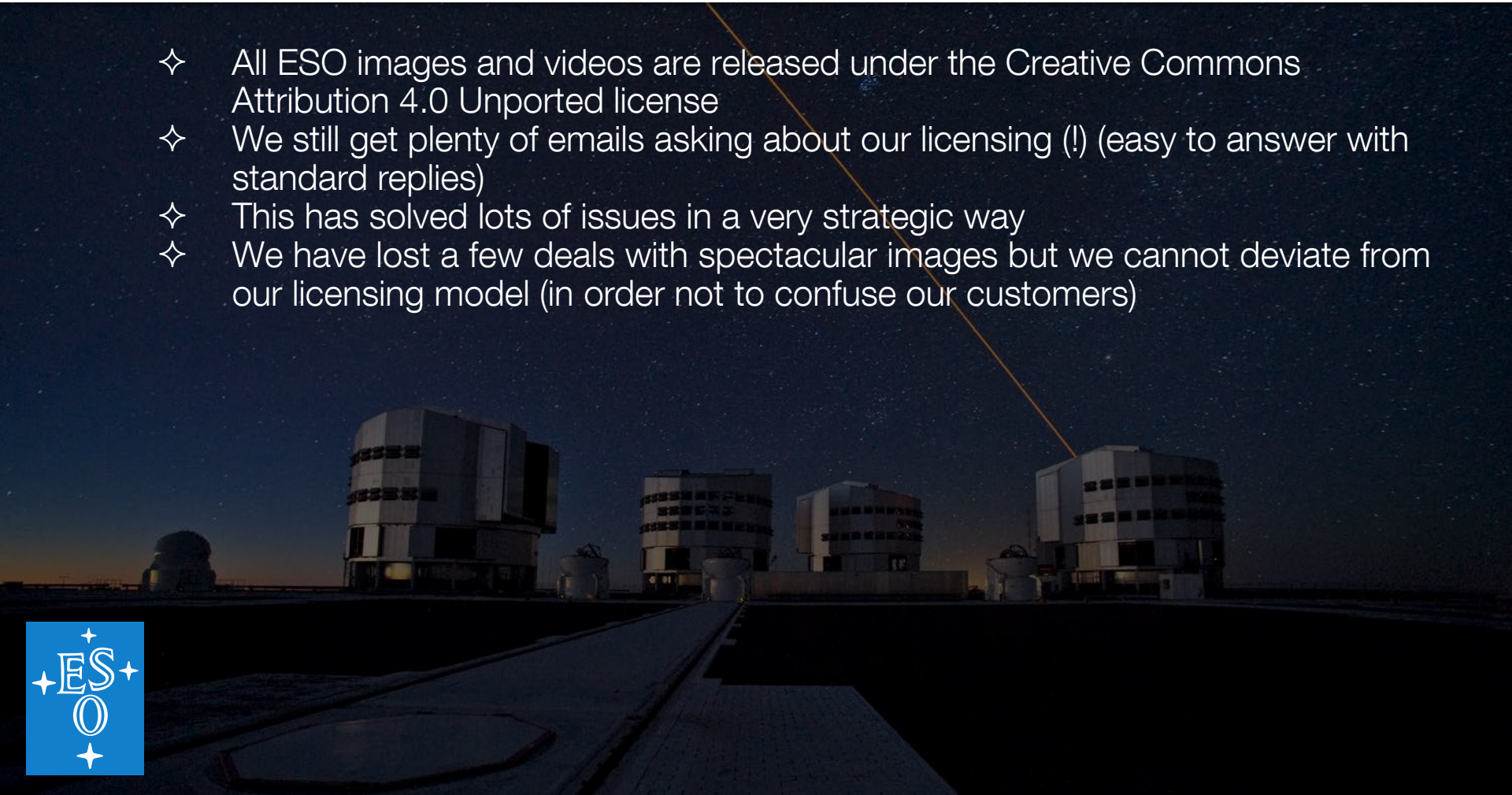
- Artist's impression of ESO Supernova Planetarium & Visitor Centre
  Image
- Artist's impression of ESO Supernova Planetarium & Visitor Centre
  Image
- Artist's impression of ESO Supernova Planetarium & Visitor Centre
  Image
- Artist's impression of ESO Supernova Planetarium & Visitor Centre
  Image
- Making Way for Construction of the ESO Supernova
  Image
- eso1544
  Press Release
- Barnard's Loop and the Magellanic Clouds
  Image
- La Silla Time-lapse NTT
  Video
- A Fish-eye View Inside UT1 (time-lapse)
  Video
- A Fish-eye View on the VLT
  Video

Licensing



- Apply as liberal a licensing model as possible
- Only restrict the distribution if it is absolutely necessary and if you are prepared to lose 10-1000 times the visibility of an open licensing model

Licensing (case ESO)



- All ESO images and videos are released under the Creative Commons Attribution 4.0 Unported license
- We still get plenty of emails asking about our licensing (!) (easy to answer with standard replies)
- This has solved lots of issues in a very strategic way
- We have lost a few deals with spectacular images but we cannot deviate from our licensing model (in order not to confuse our customers)

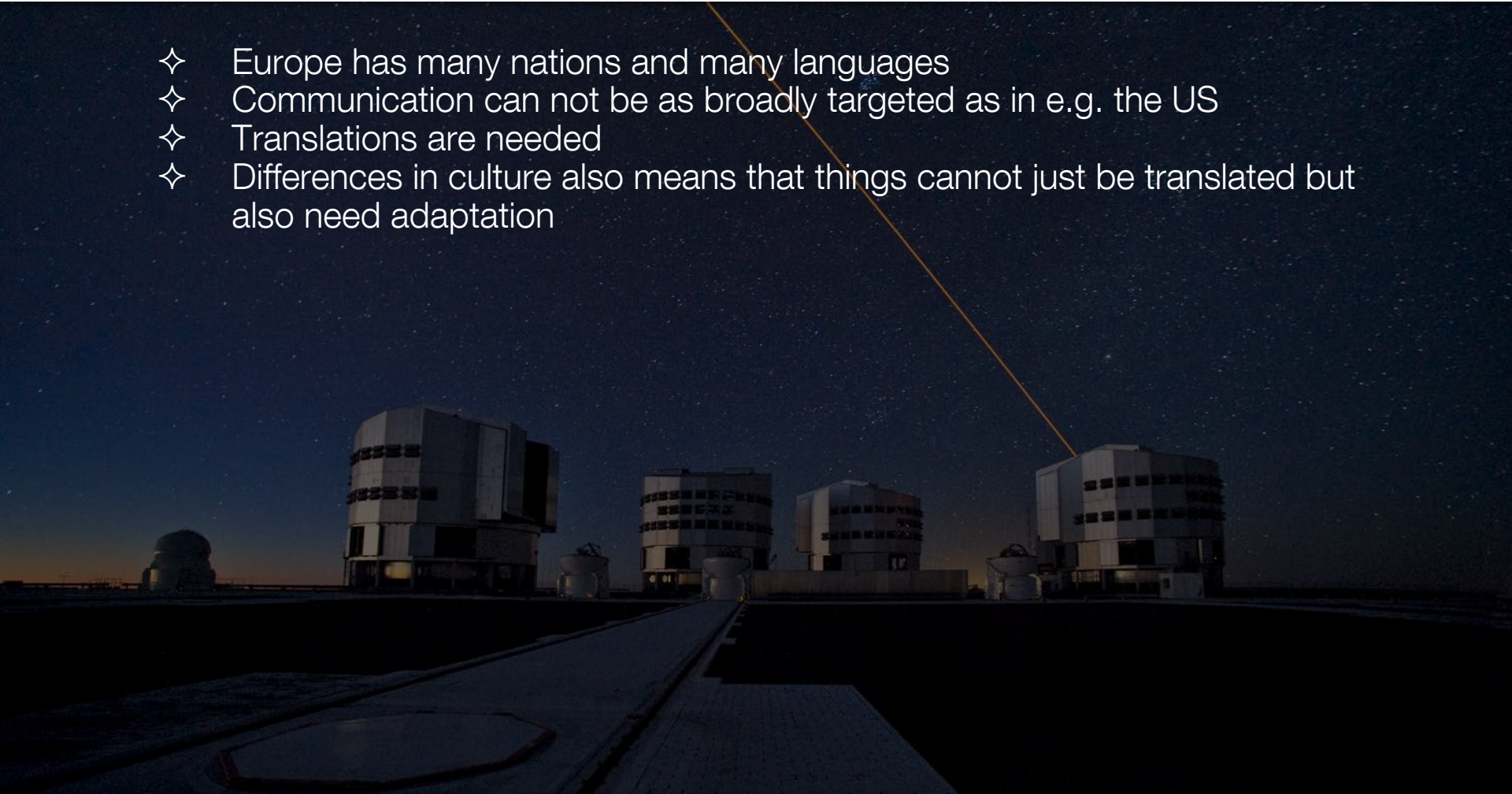

www.eso.org
An ESO fulldome mini show
JOURNEY TO THE CENTRE OF THE MILKY WAY
Featuring the Sacred Site soundtrack by
Michael Stearns
Embark on a *Journey to the Centre of the Milky Way* and
during seven minutes travel faster than light,
from the driest place on Earth, the Atacama Desert in Chile right to the centre of our own galaxy,
where a black hole is consuming anything that strays into its path.
84 million stars will appear in front of your eyes, each hiding mysteries waiting to be solved.
Are there planets around them, perhaps with moons?
Do they have water? Could they harbour life?
Directed by: Lars Lindberg Christensen
Art direction, Production design: Luis Calçada | Producer: Luis Calçada
Written by: Georgia Bladon & Lars Lindberg Christensen | 3D animations and graphics: Luis Calçada & Martin Kornmesser
Gas cloud simulation: ESO/S. Gillessen/MPE/Marc Schartmann | Editing: Luis Calçada | Narration: Sara Mendes da Costa
Soundtrack & sound effects: Sacred Site by Michael Stearns | Executive producer: Lars Lindberg Christensen
Footage and photos: ESO, Stéphane Guisard (eso.org/~sguisard), Nick Risinger (skysurvey.org) & Serge Brunier


ESO
ESO Supernova
FROM EARTH TO THE UNIVERSE
This stunning voyage through space and time conveys the Universe revealed to us by science. Revel in the splendour of the worlds in the Solar System. Travel to the colourful birthplaces and burial grounds of stars. And still further out beyond the Milky Way to the unimaginable immensity of myriads of galaxies.
AN ESO FULLDOME PRODUCTION
DIRECTED BY THEOFANIS MATSOPOULOS PRODUCED BY THEOFANIS MATSOPOULOS AND THE EUROPEAN SOUTHERN OBSERVATORY (ESO)
STEREOSCOPY BY JOHAN B. MONELL
PLANETARIUM PRODUCTION THEOFANIS MATSOPOULOS 3D ANIMATION AND GRAPHICS THEOFANIS MATSOPOULOS · LUIS CALÇADA · MARTIN KORNMESSER
SCRIPT AND SCIENTIFIC ADVICE NICOLAS MATSOPOULOS · LARS LINDBERG CHRISTENSEN · ANNE RHODES
NARRATION SARA MENDES DA COSTA AUDIO BY THEOFANIS MATSOPOULOS EXECUTIVE PRODUCER LARS LINDBERG CHRISTENSEN
www.eso.org
#Earth2Universe

From Earth to the Universe

- The world's first full-length fulldome planetarium movie freely available for download.
- Released in high-resolution 4k, 2k, 1.5k fulldome formats (30 FPS), for the worldwide planetarium community to download (via our CDN) and use
- Web page: via supernova.eso.org/ips
- Trailer is available in Fulldome and Flat.
- v2 update/bug fixing/improvement just released
- Educational material is planned

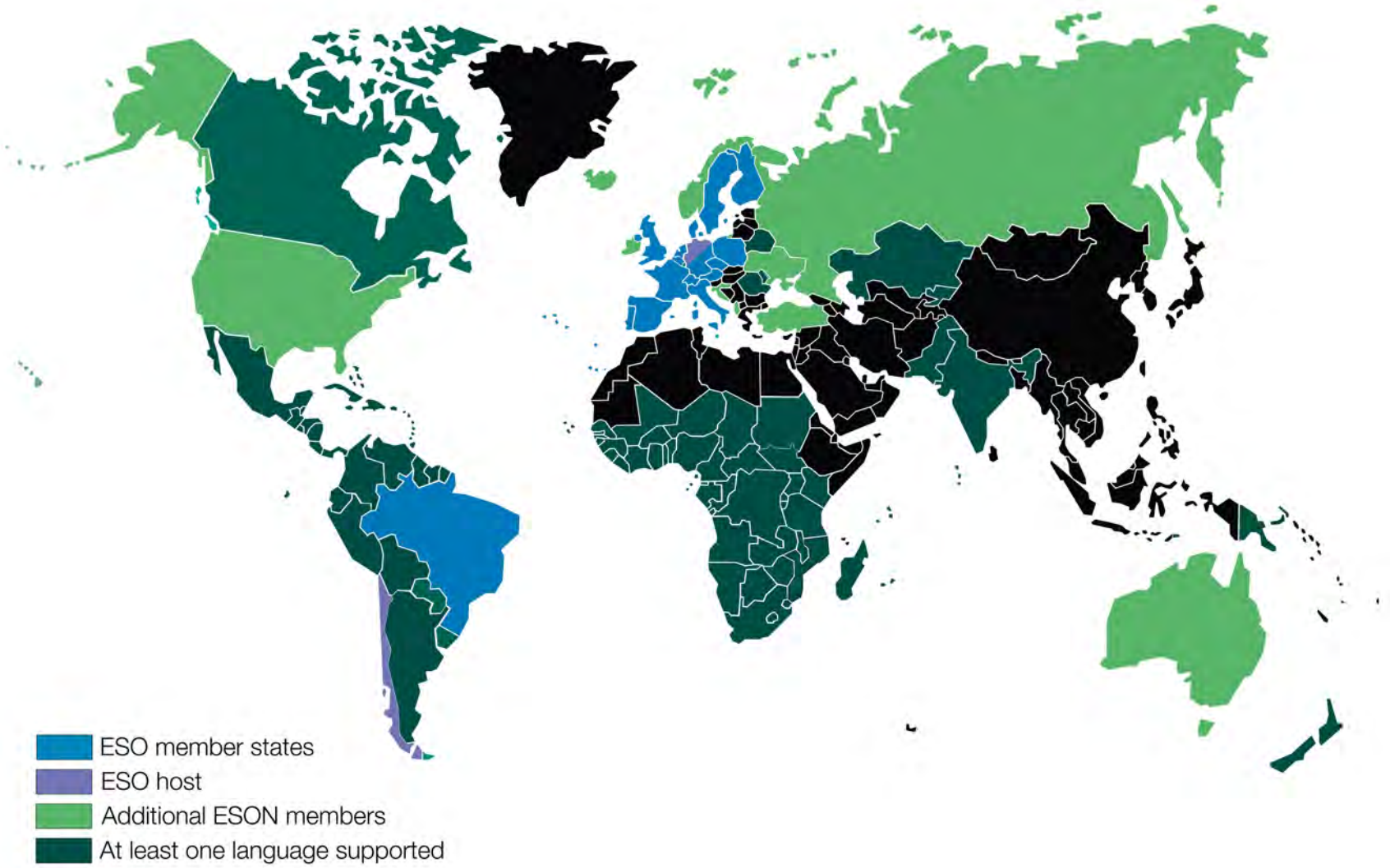
Multi-national Europe



- Europe has many nations and many languages
- Communication can not be as broadly targeted as in e.g. the US
- Translations are needed
- Differences in culture also means that things cannot just be translated but also need adaptation

Multi-national Europe (case ESO)

- Create a sustainable win-win with national partners
- ESO Science Outreach Network (ESON): representatives at national level with formal contracts
- Press releases now available in all 12 languages of member states + 4 other languages (28 versions)
- ESON “mini sites” available on www.eso.org, with translated press releases and contact details
- Other products: captions, subtitles etc.


ESO member states
ESO host
Additional ESON members
At least one language supported

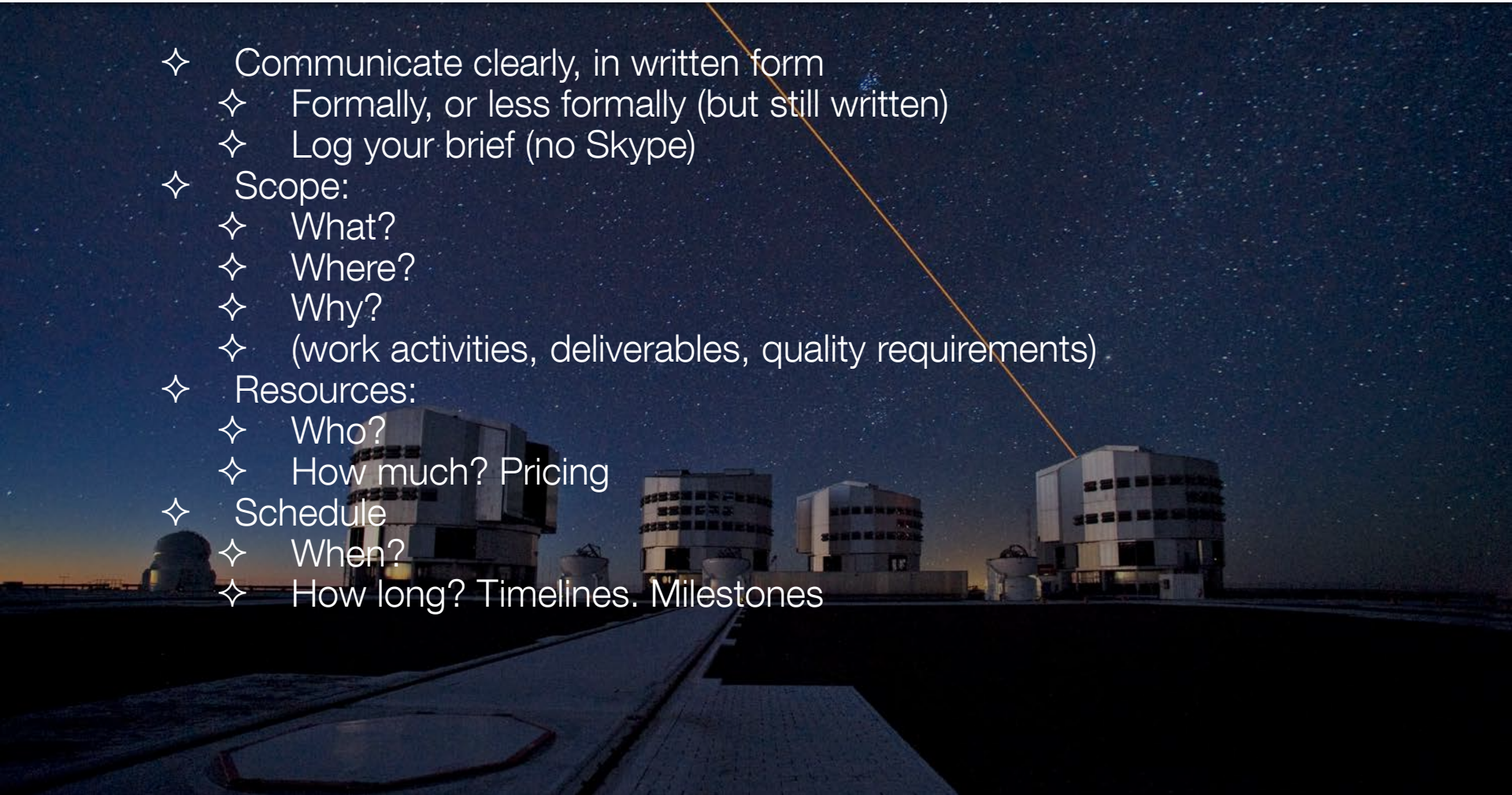
From A to B

Production cycle for (communication) products

- Almost universal across different products, unless you're an artist (and even then …): a finite number of the same steps are necessary to make a product.
- Even communication products made for very different target groups usually involve the exact same steps.
- This applies to 1-person bands, as well as teams.
- This applies to small tasks, as well as large projects.

Production cycle for (communication) products

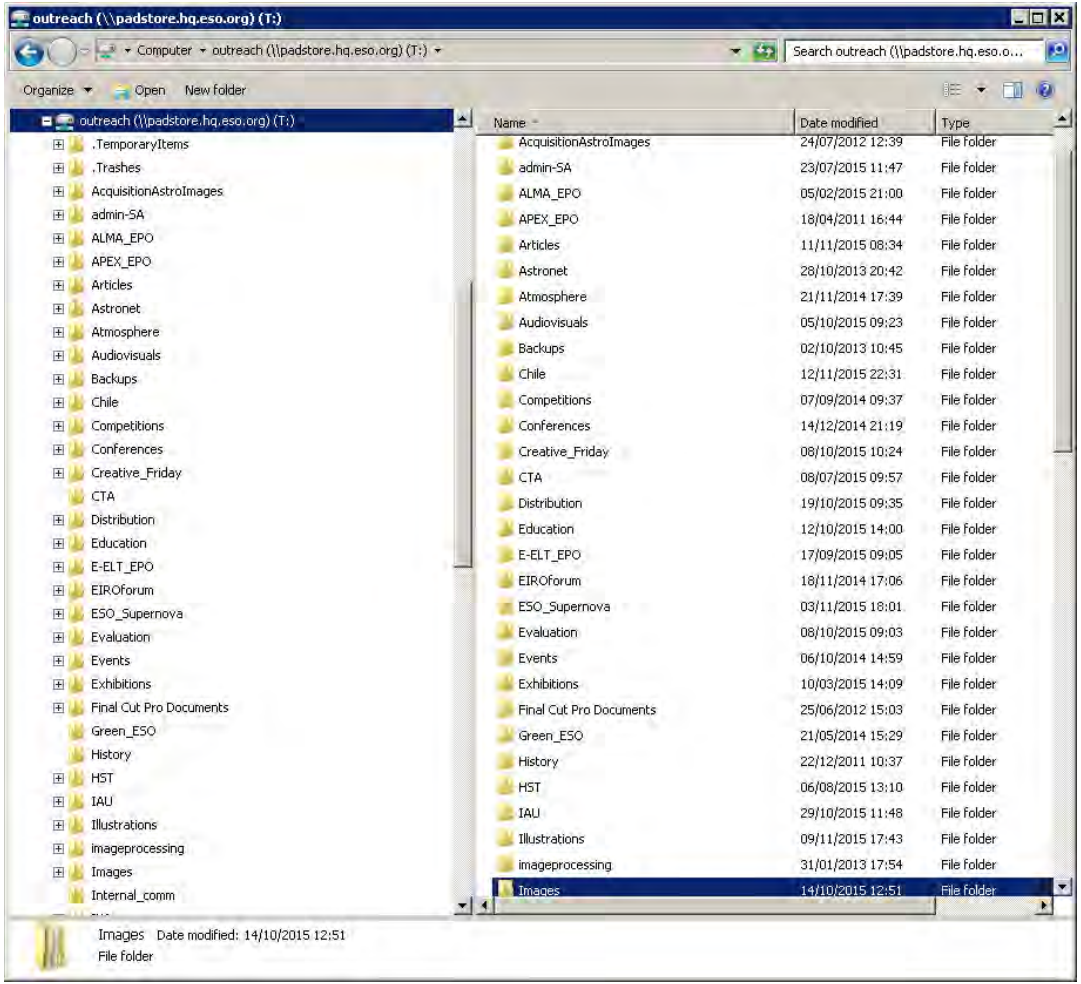
The Brief/Statement of work/Scope of Work/Ticket/Request

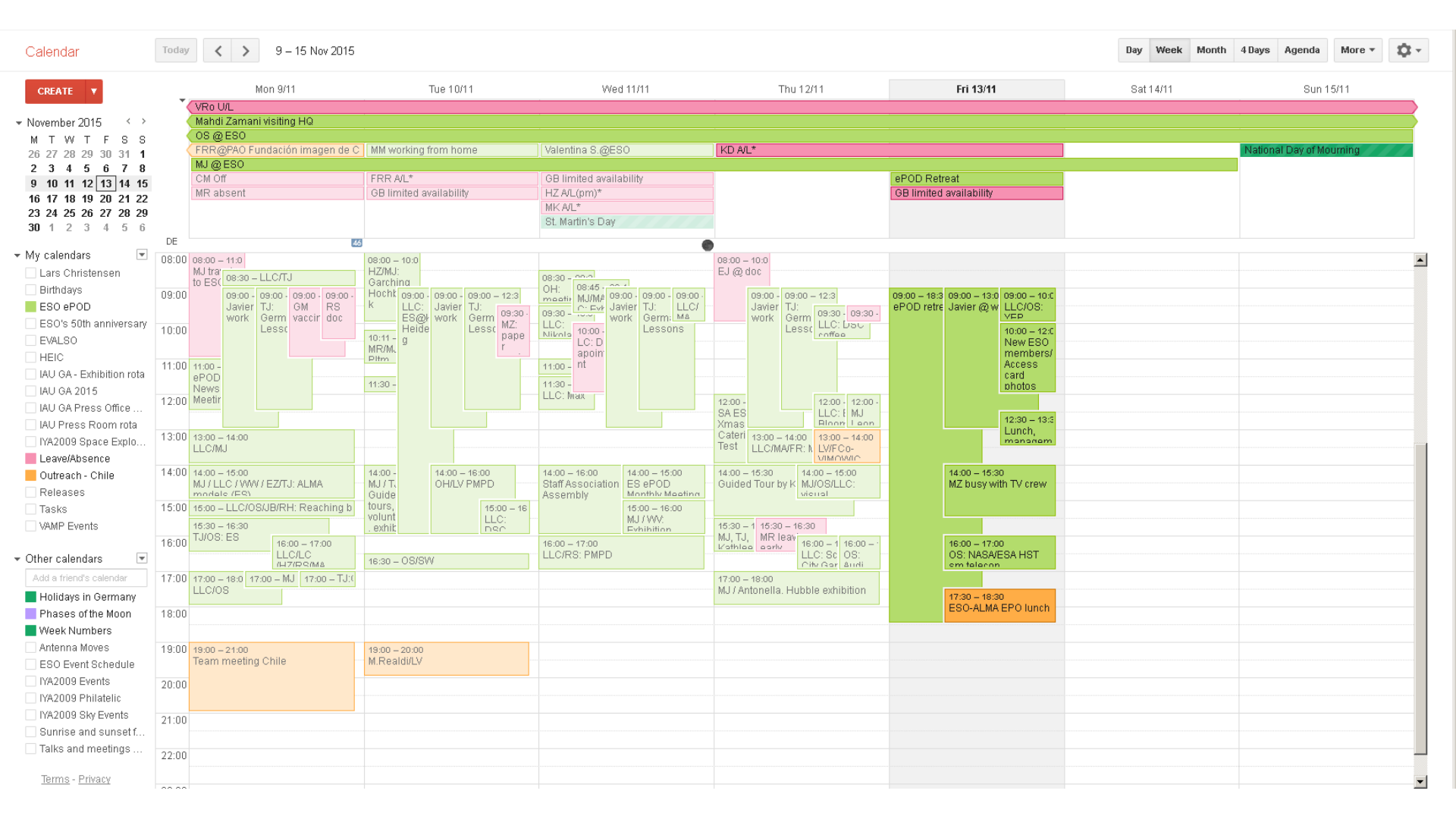


- Communicate clearly, in written form
  - Formally, or less formally (but still written)
  - Log your brief (no Skype)
- Scope:
  - What?
  - Where?
  - Why?
  - (work activities, deliverables, quality requirements)
- Resources:
  - Who?
  - How much? Pricing
- Schedule
  - When?
  - How long? Timelines. Milestones

Collaborative Tools (ESO)

- Collaborative workflows in cloud spreadsheets
  - Transparency
  - Visual roles, easy delegation
  - Visual scheduling and re-sorting
- Collaborative documents for creative hands-on work like writing
- Other tools: Joint calendars, Wiki/internal webpages, Bug tracker (1 email = 1 ticket)
- Joint network or cloud drive for everything
- Data gathering: Preserving experience and analyse
- Good internal communication
- Internal guidelines
- Meetings (regular, effective, minuted)
- Presence –physical, email, instant messaging, video conferencing
- End-to-end project cycle awareness: Conceive, spec, implement, iterate, seek approvals/Quality Control, publish, test, evaluate


outreach (\\padstore.hq.eso.org) (T:)
Computer ▸ outreach (\\padstore.hq.eso.org) (T:) ▸
Search outreach (\\padstore.hq.eso.o...
Organize
Open
New folder
outreach (\\padstore.hq.eso.org) (T:)
.TemporaryItems
.Trashes
AcquisitionAstroImages
admin-SA
ALMA_EPO
APEX_EPO
Articles
Astronet
Atmosphere
Audiovisuals
Backups
Chile
Competitions
Conferences
Creative_Friday
CTA
Distribution
Education
E-ELT_EPO
EIROforum
ESO_Supernova
Evaluation
Events
Exhibitions
Final Cut Pro Documents
Green_ESO
History
HST
IAU
Illustrations
imageprocessing
Images
Internal_comm
Name
Date modified
Type
AcquisitionAstroImages 24/07/2012 12:39 File folder
admin-SA 23/07/2015 11:47 File folder
ALMA_EPO 05/02/2015 21:00 File folder
APEX_EPO 18/04/2011 16:44 File folder
Articles 11/11/2015 08:34 File folder
Astronet 28/10/2013 20:42 File folder
Atmosphere 21/11/2014 17:39 File folder
Audiovisuals 05/10/2015 09:23 File folder
Backups 02/10/2013 10:45 File folder
Chile 12/11/2015 22:31 File folder
Competitions 07/09/2014 09:37 File folder
Conferences 14/12/2014 21:19 File folder
Creative_Friday 08/10/2015 10:24 File folder
CTA 08/07/2015 09:57 File folder
Distribution 19/10/2015 09:35 File folder
Education 12/10/2015 14:00 File folder
E-ELT_EPO 17/09/2015 09:05 File folder
EIROforum 18/11/2014 17:06 File folder
ESO_Supernova 03/11/2015 18:01 File folder
Evaluation 08/10/2015 09:03 File folder
Events 06/10/2014 14:59 File folder
Exhibitions 10/03/2015 14:09 File folder
Final Cut Pro Documents 25/06/2012 15:03 File folder
Green_ESO 21/05/2014 15:29 File folder
History 22/12/2011 10:37 File folder
HST 06/08/2015 13:10 File folder
IAU 29/10/2015 11:48 File folder
Illustrations 09/11/2015 17:43 File folder
imageprocessing 31/01/2013 17:54 File folder
Images 14/10/2015 12:51 File folder
Images Date modified: 14/10/2015 12:51
File folder


Calendar
Today
9 – 15 Nov 2015
Day
Week
Month
4 Days
Agenda
More
CREATE
November 2015
M T W T F S S
26 27 28 29 30 31 1
2 3 4 5 6 7 8
9 10 11 12 13 14 15
16 17 18 19 20 21 22
23 24 25 26 27 28 29
30 1 2 3 4 5 6
My calendars
Lars Christensen
Birthdays
ESO ePOD
ESO's 50th anniversary
EVALSO
HEIC
IAU GA - Exhibition rota
IAU GA 2015
IAU GA Press Office ...
IAU Press Room rota
IYA2009 Space Explo...
Leave/Absence
Outreach - Chile
Releases
Tasks
VAMP Events
Other calendars
Add a friend's calendar
Holidays in Germany
Phases of the Moon
Week Numbers
Antenna Moves
ESO Event Schedule
IYA2009 Events
IYA2009 Philatelic
IYA2009 Sky Events
Sunrise and sunset f...
Talks and meetings ...
Terms - Privacy
Mon 9/11
Tue 10/11
Wed 11/11
Thu 12/11
Fri 13/11
Sat 14/11
Sun 15/11
VRo U/L
Mahdi Zamani visiting HQ
OS @ ESO
FRR@PAO Fundación imagen de C
MM working from home
Valentina S.@ESO
KD A/L*
National Day of Mourning
MJ @ ESO
CM Off
MR absent
FRR A/L*
GB limited availability
GB limited availability
HZ A/L(pm)*
MK A/L*
St. Martin's Day
ePOD Retreat
GB limited availability
DE
08:00
09:00
10:00
11:00
12:00
13:00
14:00
15:00
16:00
17:00
18:00
19:00
20:00
21:00
22:00
08:00 – 11:0
MJ tra
to ES
08:30 – LLC/TJ
09:00 -
Javier
work
09:00 -
TJ:
Germ
Lesso
09:00 -
GM
vaccir
09:00 -
RS
doc
11:00 -
ePOD
News
Meetir
13:00 – 14:00
LLC/MJ
14:00 – 15:00
MJ / LLC / WW / EZ/TJ: ALMA
15:00 – LLC/OS/JB/RH: Reaching b
15:30 – 16:30
TJ/OS: ES
16:00 – 17:00
LLC/LC
17:00 – 18:0
LLC/OS
17:00 – MJ
17:00 – TJ:
19:00 – 21:00
Team meeting Chile
08:00 – 10:0
HZ/MJ:
Garching
Hocht
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09:00 -
LLC:
ES@
Heide
g
09:00 -
Javier
work
09:00 – 12:3
TJ:
Germ
Lesso
09:30 -
MZ:
pape
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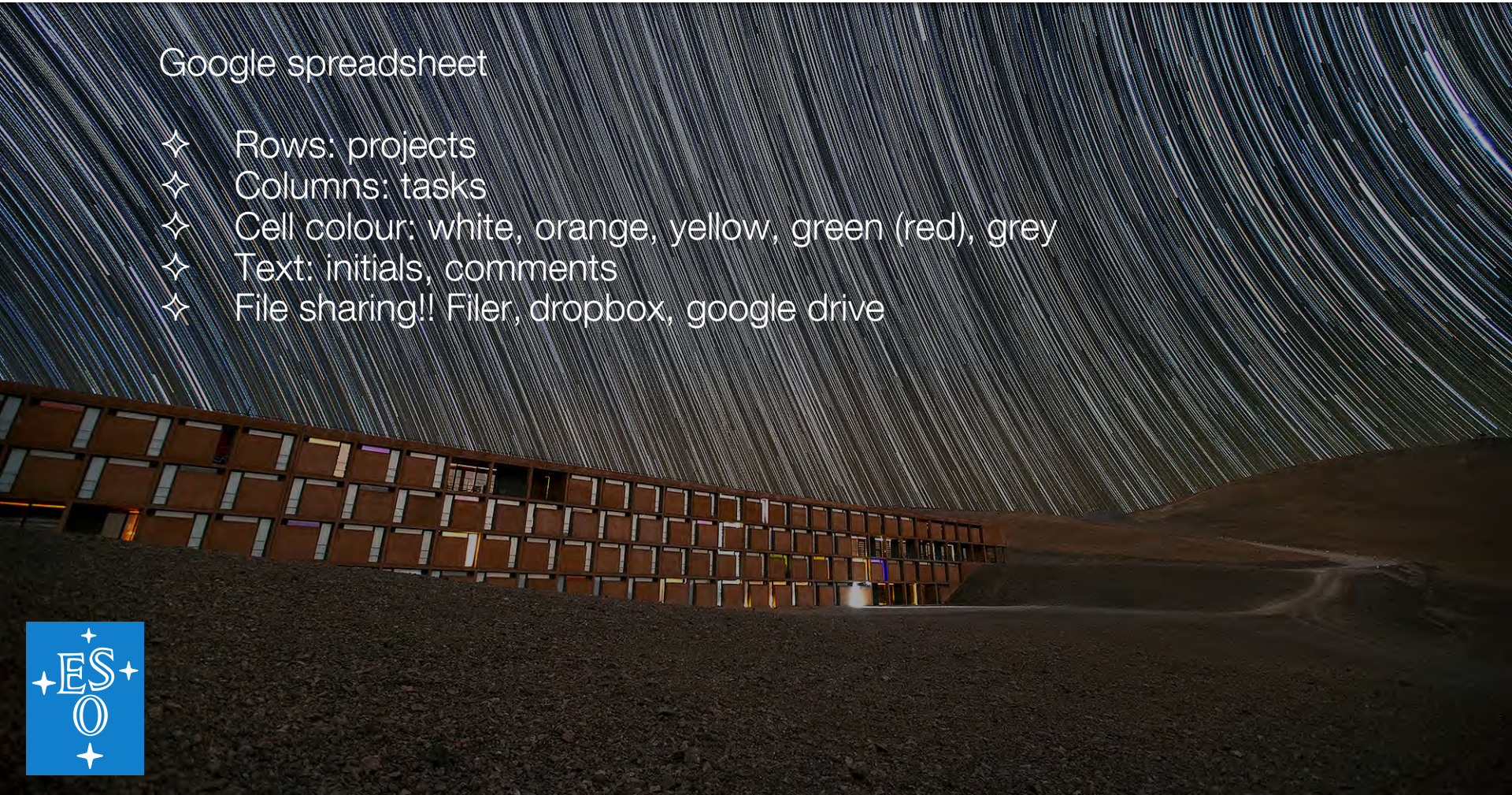
10:11 -
MR/M
Pitm
11:30 -
14:00 -
MJ / T
Guide
tours,
volunt
exhib
14:00 – 16:00
OH/LV PMPD
15:00 – 16
LLC:
DSC
16:30 – OS/SW
19:00 – 20:00
M.Realdi/LV
08:30 -
OH:
09:30 -
LLC:
Nikola
11:00 -
11:30 -
LLC: Max
14:00 – 16:00
Staff Association
Assembly
14:00 – 15:00
ES ePOD
Monthly Meeting
15:00 – 16:00
MJ / WV:
Exhibition
16:00 – 17:00
LLC/RS: PMPD
08:45 -
MJ/MA
09:00 -
Javier
work
09:00 -
TJ:
Germ:
Lessons
09:00 -
LLC/
MA
10:00 -
LC: D
apoin
nt
08:00 – 10:0
EJ @ doc
09:00 -
Javier
work
09:00 – 12:3
TJ:
Germ
Lesso
09:30 -
LLC: DSC
coffee
09:30 -
12:00 -
SA ES
Xmas
Cateri
Test
12:00 -
LLC: E
Bloon
12:00 -
MJ
Leon
13:00 – 14:00
LLC/MA/FR: M
13:00 – 14:00
LV/FCo-
VIMOWIC
14:00 – 15:30
Guided Tour by K
14:00 – 15:00
MJ/OS/LLC:
visual
15:30 – 1
MJ, TJ,
Kathlee
15:30 – 16:30
MR leav
early
16:00 – 1
LLC: Sc
City Gar
16:00 –
OS:
Audi
17:00 – 18:00
MJ / Antonella. Hubble exhibition
09:00 – 18:3
ePOD retre
09:00 – 13:0
Javier @ w
09:00 – 10:0
LLC/OS:
VEP
10:00 – 12:0
New ESO
members/
Access
card
photos
12:30 – 13:3
Lunch,
managem
14:00 – 15:30
MZ busy with TV crew
16:00 – 17:00
OS: NASA/ESA HST
sm telecon
17:30 – 18:30
ESO-ALMA EPO lunch

The Collaborative Spreadsheet



Google spreadsheet

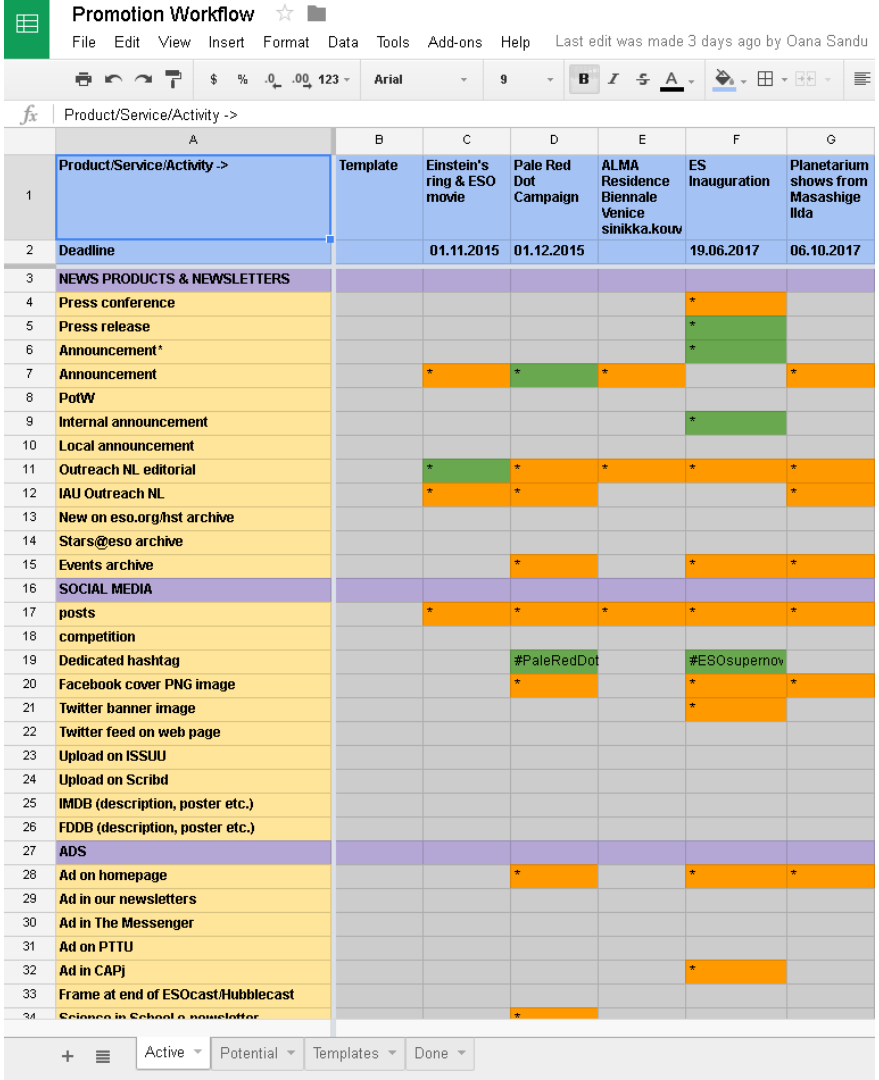
- Rows: projects
- Columns: tasks
- Cell colour: white, orange, yellow, green (red), grey
- Text: initials, comments
- File sharing!! Filer, dropbox, google drive

Examples

Pipelines

The following Pipelines are not part of the deliverables as such but illustrate the implementation. They are all sensitive to resource reductions and even, to a lesser extent, change of personnel.

1. **News pipeline**: state-of-the-art end-to-end operation with careful evaluation in both ends, full documentation of all steps. Status: Sub-critical. The incoming stories are increasing (even dramatically lately with ALMA), and we cannot take on the increase. Our scouring on astro-ph has been given up. Our statistics and evaluation are not kepr updated. We have had small diplomatic incidents, and some scientific mistakes. The risk is increasing.
2. **Photo pipeline**: Full evaluation, colour-correcting, publication, archiving of ~2000 incoming images per year. The best enter news production as PoTWs. Status: nominal. (except that LLC is responsible for this pipeline, which is not nominal)
3. **Data-to-images pipeline**: World-leading production of astronomical imagery, with the bulk of the work outsourced. Status: nominal, but no room to expand with the ever growing image sizes.
4. **Print pipeline**: End-to-end operation with full evaluation of needs, target groups, print volumes, scheduling, procurement (pricing). Status: nominal, but fully loaded until into 2014.
5. **Community Coordination pipeline:** promoting ePOD's products and activities towards relevant stakeholders, which also includes physical distribution or distribution of electronic newsletters. All work is outsourced.
6. **Web pipeline:** the one-mail reporting of bugs, corrections or new tasks, and the rapid response of the team more than 5000 times per year is incredibly efficient. Continuous interaction with the developers ensure that the experience gained and changing needs, can be taken into account. Most of this work is outsourced. Status: nominal
7. **Translation pipeline**: by good management of the ESON network all weekly translations are made, and with a 95% delivery-on-time. Status: nominal.



Promotion Workflow

File Edit View Insert Format Data Tools Add-ons Help Last edit was made 3 days ago by Oana Sandu

Arial 9

Product/Service/Activity ->

	A	B	C	D	E	F	G
1	Product/Service/Activity ->	Template	Einstein's ring & ESO movie	Pale Red Dot Campaign	ALMA Residence Biennale Venice sinikka.kouv	ES Inauguration	Planetarium shows from Masashige Ilda
2	Deadline		01.11.2015	01.12.2015		19.06.2017	06.10.2017
3	NEWS PRODUCTS & NEWSLETTERS						
4	Press conference					*	
5	Press release					*	
6	Announcement*					*	
7	Announcement		*	*	*		*
8	PotW						
9	Internal announcement					*	
10	Local announcement						
11	Outreach NL editorial		*	*	*	*	*
12	IAU Outreach NL		*	*			*
13	New on eso.org/hst archive						
14	Stars@eso archive						
15	Events archive			*		*	*
16	SOCIAL MEDIA						
17	posts		*	*	*	*	*
18	competition						
19	Dedicated hashtag			#PaleRedDot		#ESOsupernov	
20	Facebook cover PNG image			*		*	*
21	Twitter banner image					*	
22	Twitter feed on web page						
23	Upload on ISSUU						
24	Upload on Scribd						
25	IMDB (description, poster etc.)						
26	FDDB (description, poster etc.)						
27	ADS						
28	Ad on homepage			*		*	*
29	Ad in our newsletters						
30	Ad in The Messenger						
31	Ad on PTTU						
32	Ad in CAPj					*	
33	Frame at end of ESOcast/Hubblecast						
34	Science in School e-newsletter			*			

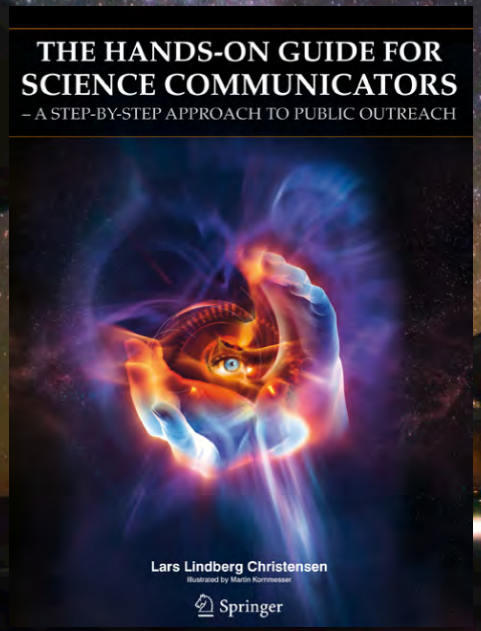
Active Potential Templates Done


nature
THE INTERNATIONAL WEEKLY JOURNAL OF SCIENCE
NEAR HORIZON
A warm terrestrial planet in orbit around Proxima Centauri, closest star to the Sun
PAGES 408 & 437
NATURE.COM/NJ
25 August 2016 £10
Vol 536, No 7617


The Economist
The Melungeons: America's lost tribe
A new target for central banks
Management lessons from the mafia
The West's most awkward ally
BRAVE NEW WORLDS
Pioneers, planets and the next space age


New Scientist
WEEKLY August 27-September 2, 2016
SHADOW WORLD
The untouchable layer of reality all around us
GENETIC RECODE
Blueprint of life gets a total rewrite
TIME TWISTER
Quantum trick reverses cause and effect
BAD MEDICINE Why so much health advice turns out to be wrong
SPECIAL REPORT: PROXIMA B
WE'VE FOUND AN EARTH-LIKE PLANET AROUND OUR NEAREST STAR
Should we go there?
Science and technology news
www.newscientist.com
US jobs in science
WHEN DARWIN MET MENDEL How genetics transformed evolution

By applying standard (industrial) management techniques we can optimise the return-on-investment, also in science communication

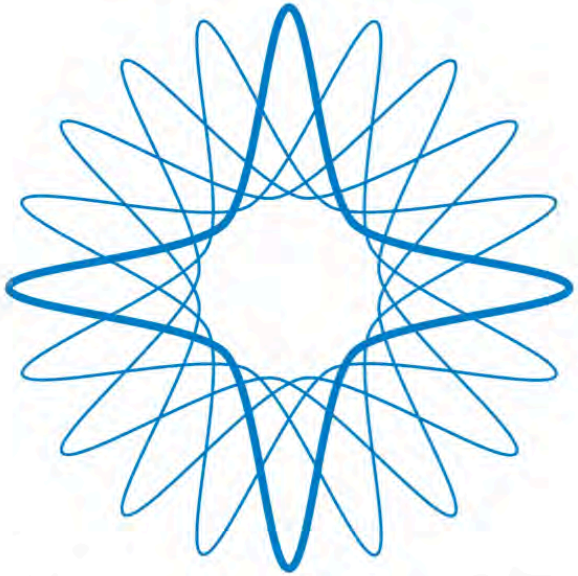


Other messages (mixed bag)

- Problems can be solved in two ways: Fire-fighting, or strategically.
- Apply the 80/20 principle
- There are two dominating poles in the production process: the chaos of creativity and the order of a rigorous workflow. In the struggle between the two, excellence is born
- Evaluate! Qualitative and quantitative success metrics
- A good communication collaboration starts with information and an openness to understand the work of the other actors
- Science communicators benefit greatly from internal collaboration within their community. The advantages of exchanging ideas and sharing resources far outweigh the disadvantages of helping colleagues who in some senses may be in direct competition with you.
- A knowledge-driven society requires proper political attention to, and proper funding for science communication in the coming years. The future of science depends on our ability to spark scientific interest in the young generation.
- A budget allocation for science communication of between 1% and 2% of the total operations budget for a scientific project seems reasonable to reflect the most common ambitions

Other messages (mixed bag)

- A communication office needs to be staffed above the critical mass to have the most impact. We (and our management) sometimes still fool ourselves, but no one can cook soup on a stone. Professional science communication is properly funded science communication
- Flexibility and freedom are two keynotes of a communication office. Having “technical autonomy” is mandatory
- Train & Publish, work “scientifically” (example: CAPjournal) to document and share your experiences!
- The customer is always right
- If it is not on the web, it does not exist
- If it ain’t broke, don’t fix it
- Make mistakes, but don’t fail. If no mistakes are made, the envelope has not been pushed far enough
- Growing win-win relations, working with the community towards a common goal. Allow Commercial exploitation.
- Any EPO product can be produced in a thousand ways. No single solution will ever be shown to be the best
- In the real world the EPO offices that succeed are those who manage their resources (human, financial, technological and natural) in the cleverest ways, who learn from experience and never merely solve problems, but analyse and use every solution and outcome to make fact-based, strategic decisions for the future.



ESO Supernova

Planetarium & Visitor Centre

supernova.eso.org

A cooperation between ESO and the Heidelberg Institute for Theoretical Studies (HITS), the research institute of the Klaus Tschira Stiftung (KTS)

Klaus Tschira Stiftung gemeinnützige GmbH

KTS

ESO

Heidelberg Institute for Theoretical Studies

HITS

ESO Supernova — Further Partners

Constellation partner

E&S EVANS & SUTHERLAND

Planet Partner

Energie-Wende-Garching EWG

Education Partners

Haus der Astronomie

Deutsches Museum

Technology Partner

CENTRO MULTIMEIOS ESPINHO

Media Partner

HARVARD ENGAGE!

make technology personal.

PUBLIC RELATIONS. CORPORATE AND BRAND MARKETING.

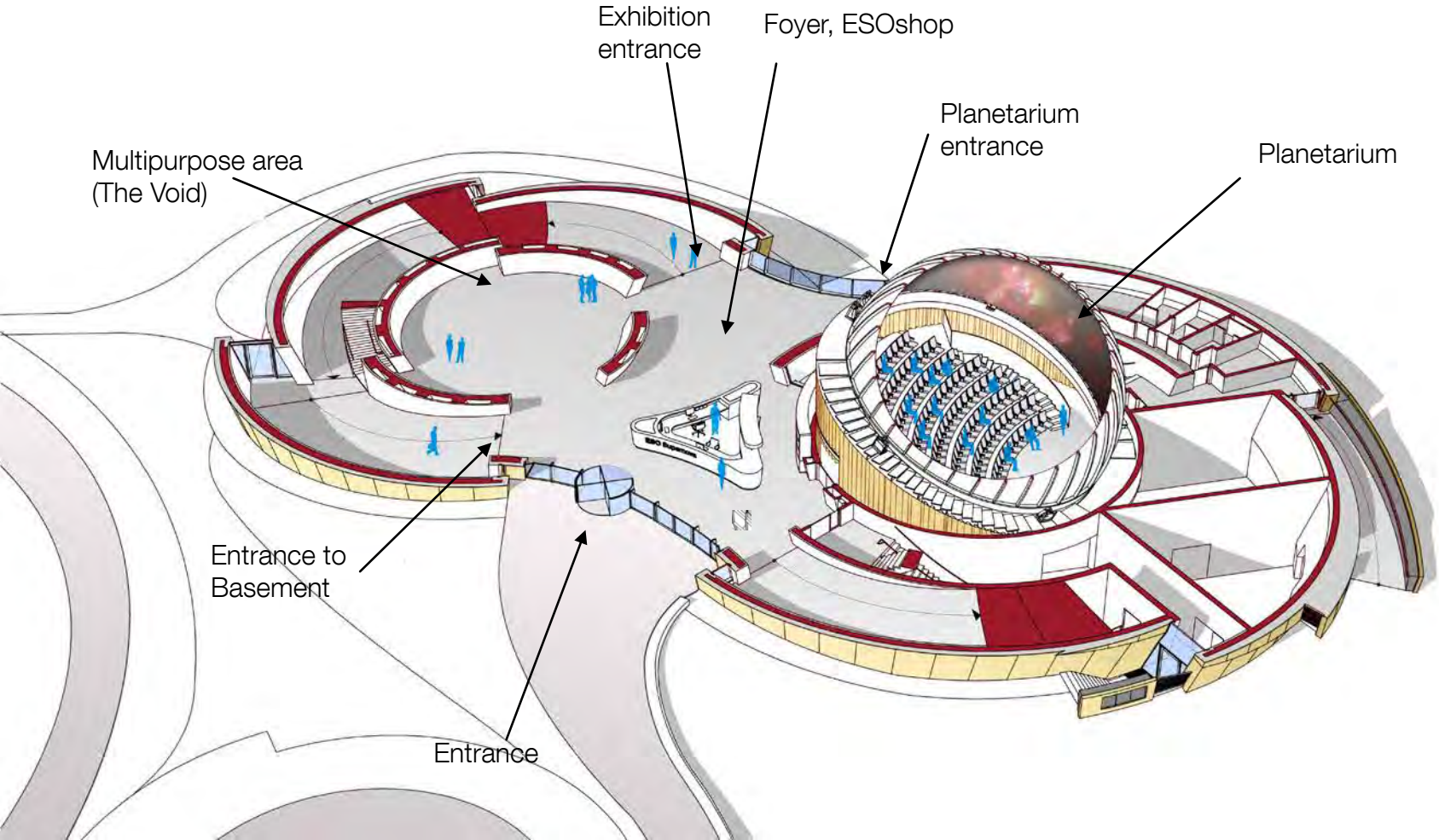
A cutting-edge astronomy education and outreach centre located on the Research Campus Garching

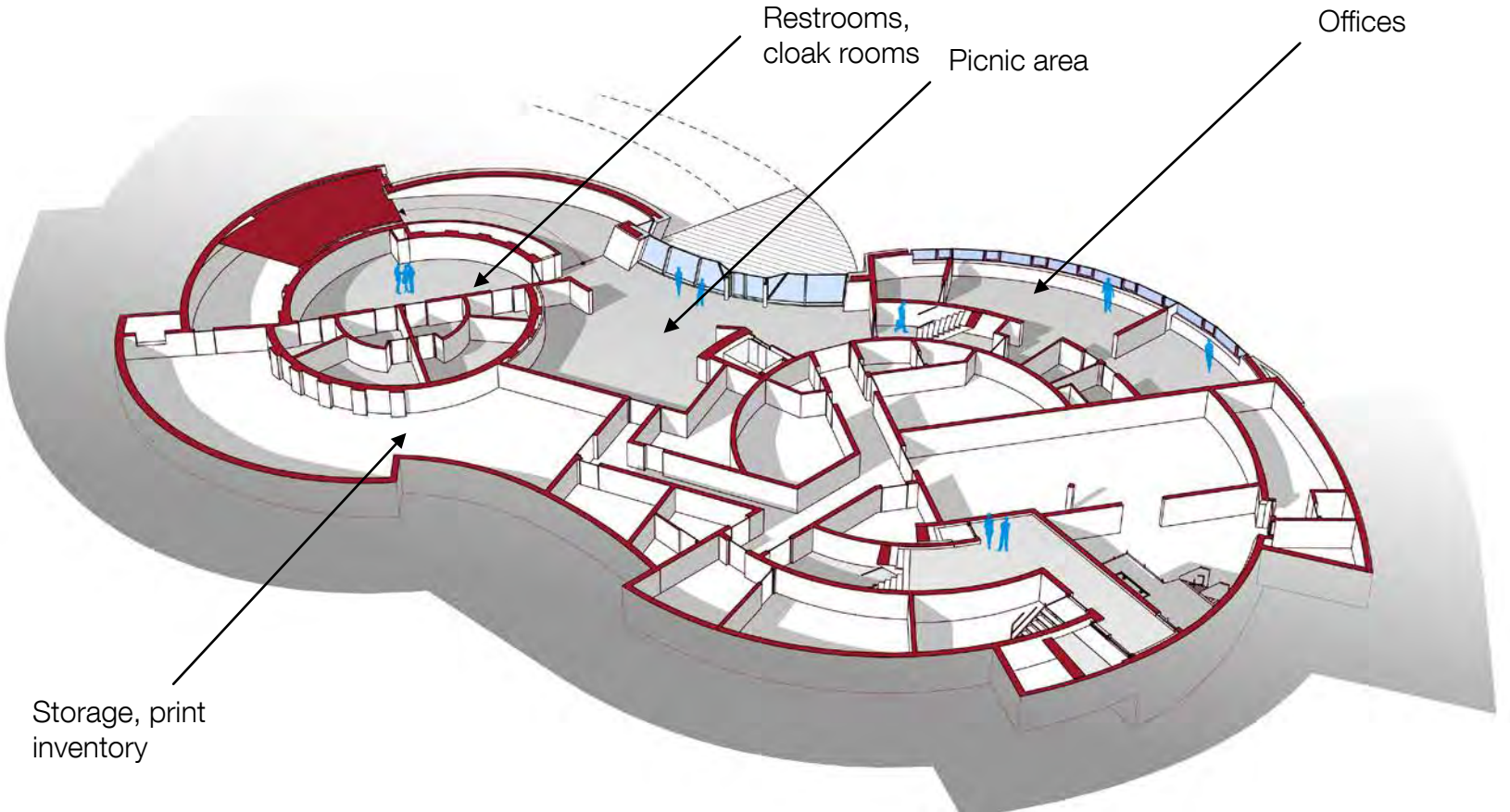

22. September 2015

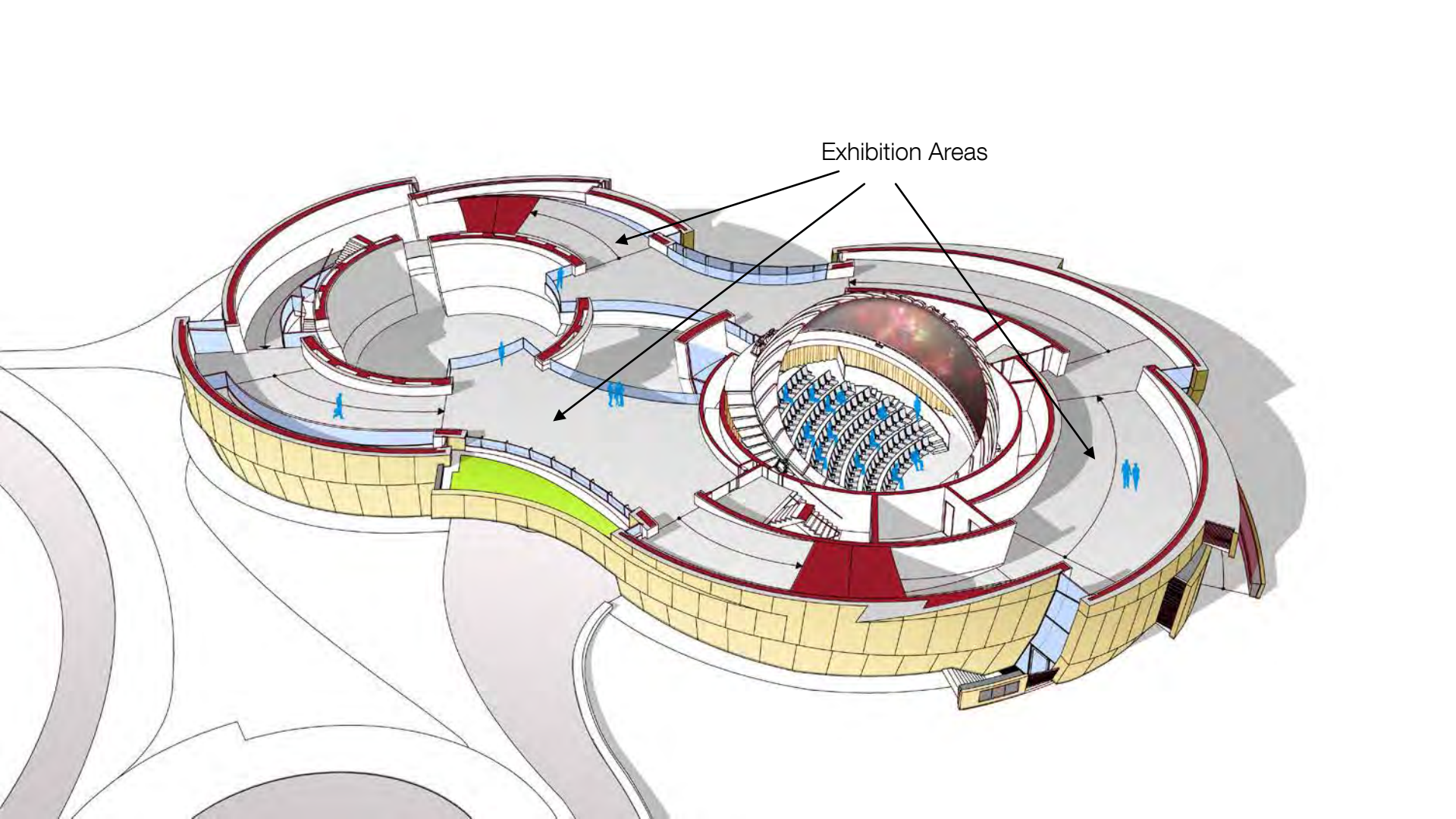

10 April 2017

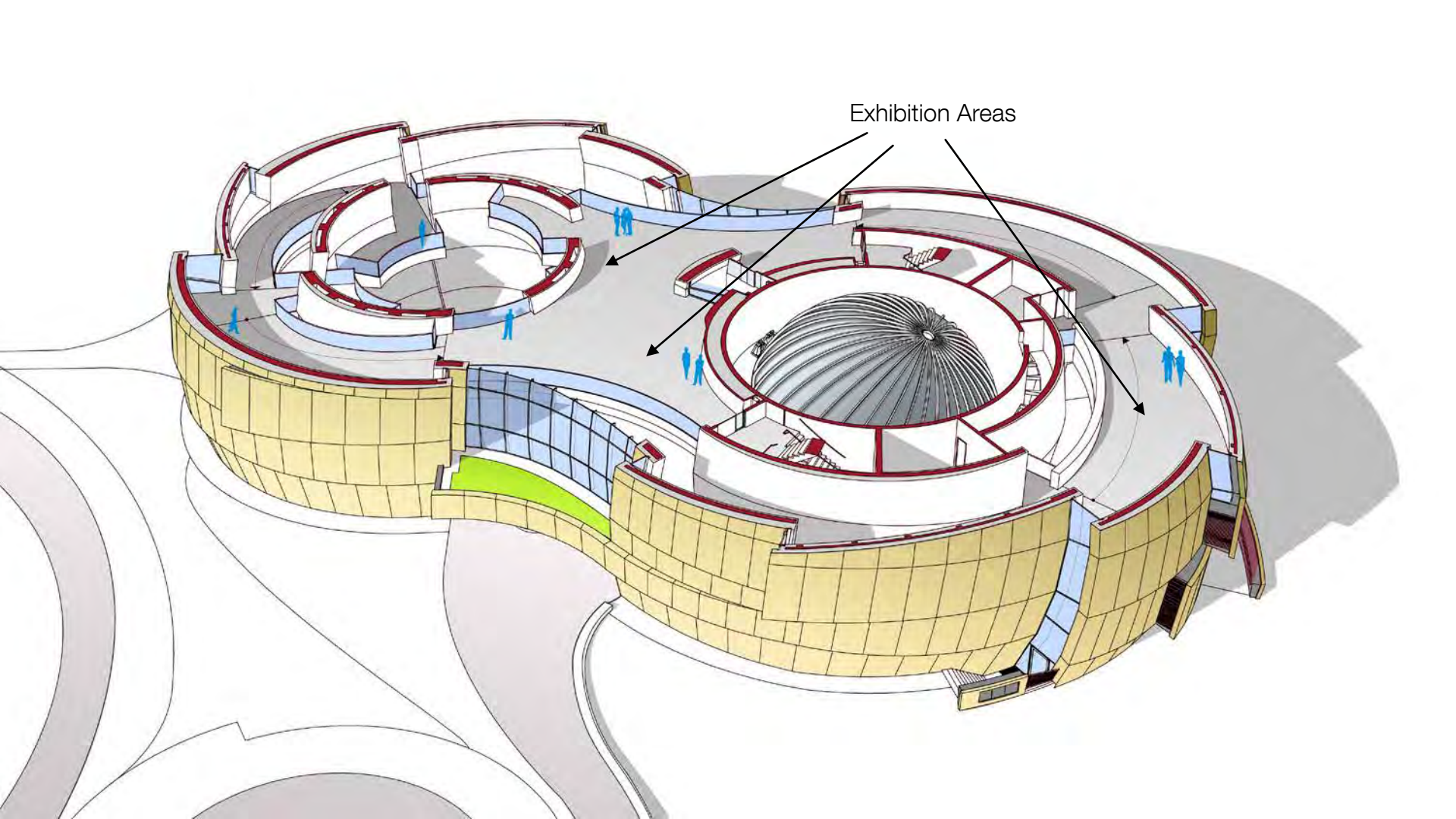

ESO Supernova
Planetarium & Visitor Centre
May 2018

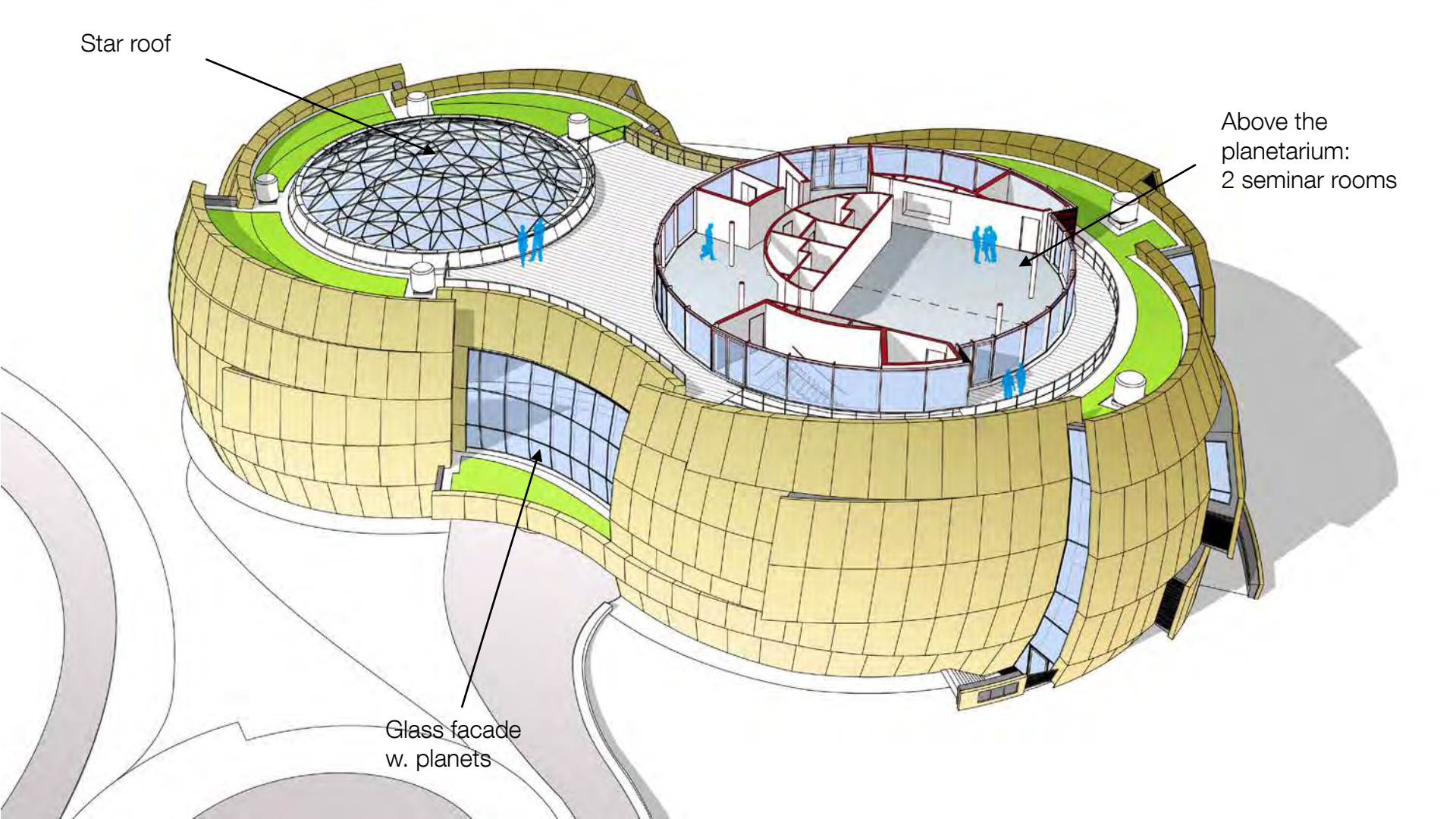
The ESO Supernova Planetarium & Visitor Centre charges no entrance and provides free access to all activities

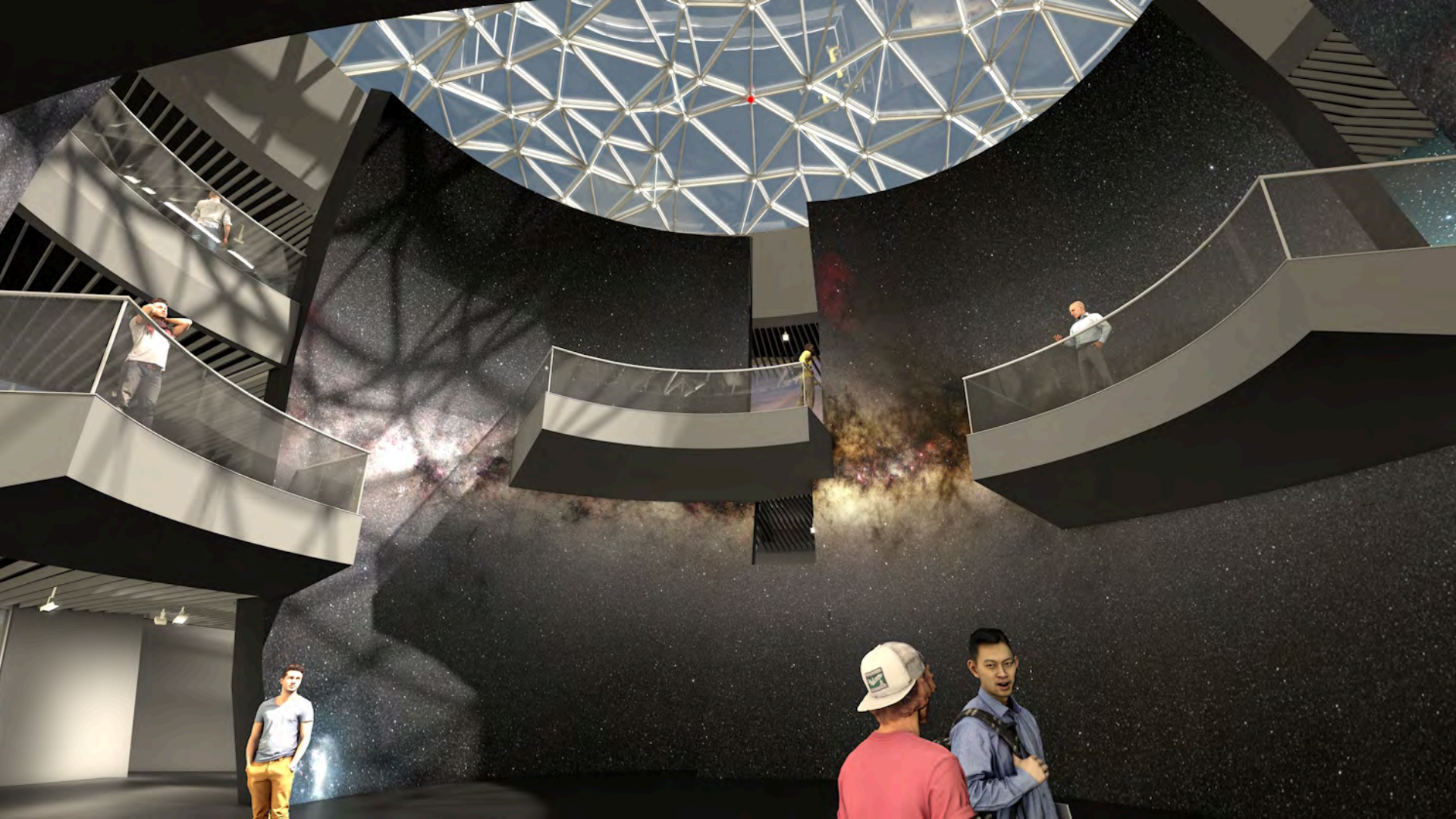

Exhibition entrance
Foyer, ESOshop
Planetarium entrance
Planetarium
Multipurpose area (The Void)
Entrance to Basement
Entrance


Restrooms,
cloak rooms
Picnic area
Offices
Storage, print
inventory


Exhibition Areas


Exhibition Areas


Star roof
Above the planetarium: 2 seminar rooms
Glass facade w. planets



Functions

- School visits: workshop/tour/show
- Planetarium shows
- Permanent + temporary exhibition
- Public events, talks, cosmic concerts, poetry under the stars …
- Teacher training
- Guided tours in the exhibition, at ESO HQ
- Visualization “showroom” for astronomers
- Window for campus science
- Company events


Thank you!