

WELCOME TO ESO!



50 YEARS REACHING NEW HEIGHTS IN ASTRONOMY



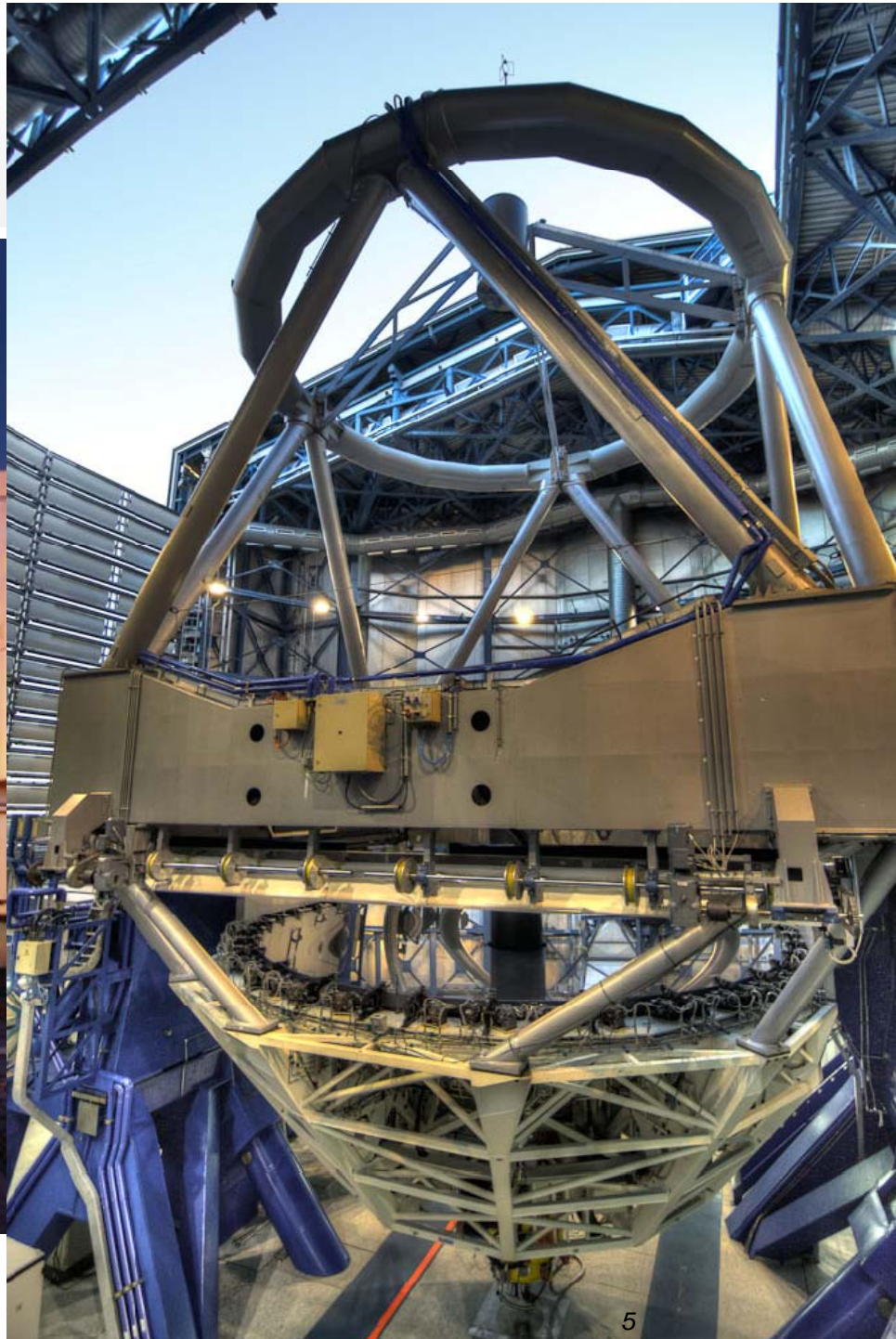


La Silla, Paranal & Chajnantor











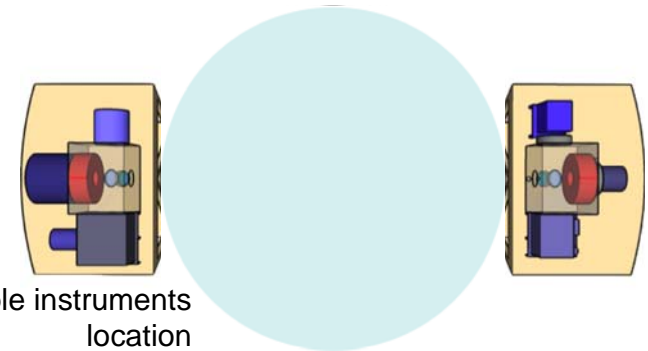
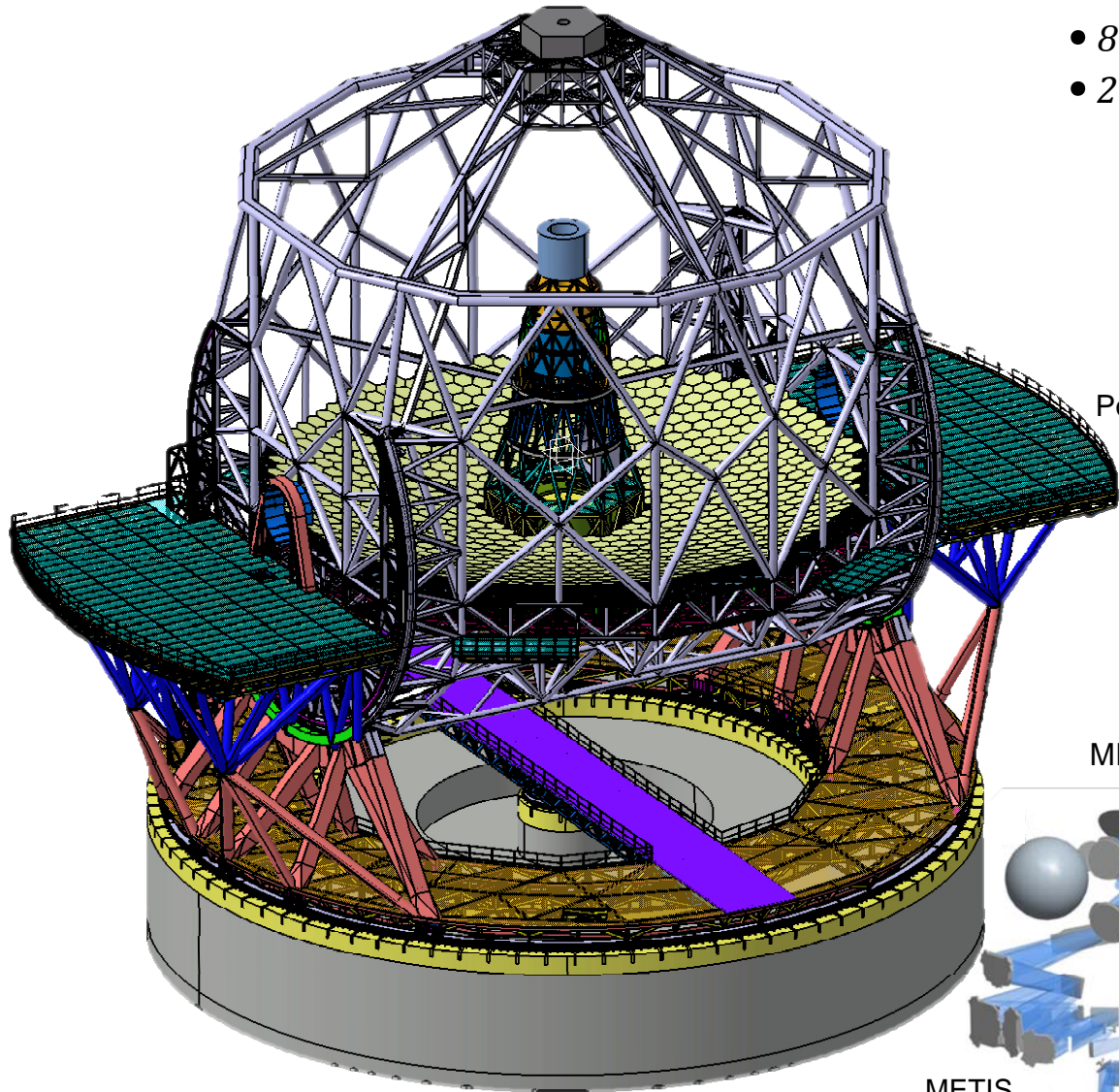
Armazones and Paranal



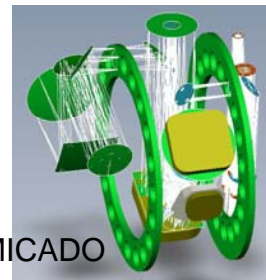
The E-ELT

Instrumentation

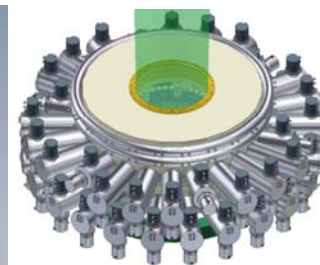
- 8 instrument concepts Phase A concluded
- 2 post-focal AO modules Phase A concluded



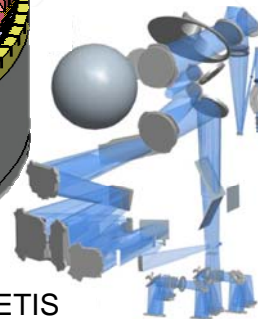
Possible instruments location



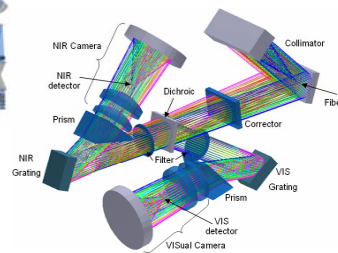
MICADO



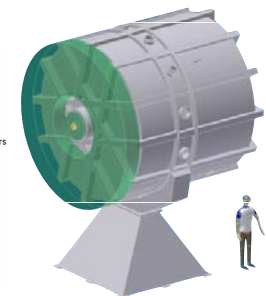
EAGLE



METIS



OPTIMOS/EVE



HARMONI

AO and ESO

- ESO's future is AO
- The second generation instrumentation
 - SPHERE
 - AOF
 - MUSE
 - ERIS
 - NAOMI
- With the E-ELT we are totally dependant on AO
 - Technology Development is an essential part of our programme...

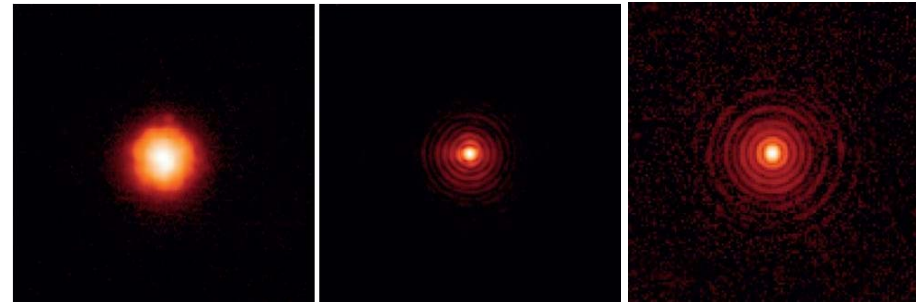
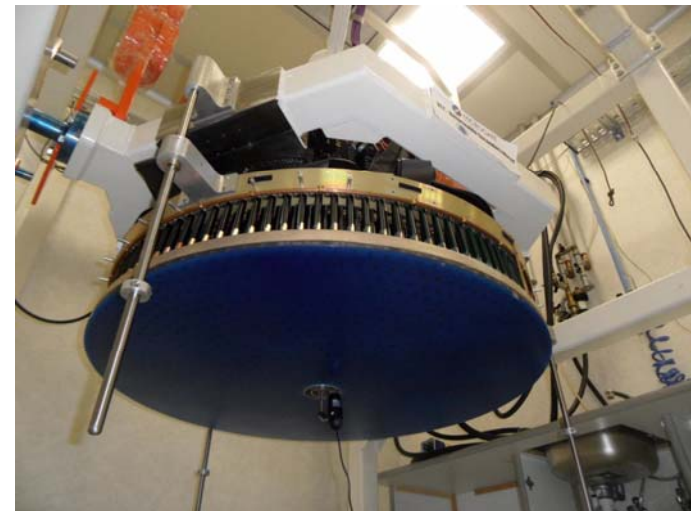


Figure 10. The SPHERE H-band point spread function is illustrated with the AO loop open (left, uncorrected image) and with the AO loop closed (middle, corrected image). The improvement brought by the correction of non-common path errors is shown to the right.





Instrument Roadmap

year	ELT-IFU	ELT-CAM	ELT-MIR	ELT-4 (MOS or HIRES)	ELT-5 (MOS or HIRES)	ELT-6	ELT-PCS
2012	Decide science requirements, AO architecture.		VISIR start on-sky	Develop science requirements for MOS/HIRES			Call for proposals for ETD
2013			TRL Review	Call for proposals for MOS/HIRES			
2014							
2015				Selection ELT-MOS/HIRES		Call for proposals	
2016							
2017							TRL check
2018							TRL check
2019						Selection	TRL check
2020							TRL check
2021 Tel technical 1 st light							TRL check
2022 Inst comm. starts							
	Pre-studies taking the form of Phase-A or Δ-Phase-A work and/or ESO-funded enabling technology development (ETD)						
	Decision point						
	Development of Technical Specifications, Statement of Work, Agreement, Instrument Start.						

- Endorsed by STC & Council
- 7 instruments currently identified for construction
- Construction proposal covers first four instruments
 - Others funded from operations
- Project Science Team leadership in science requirements definition

