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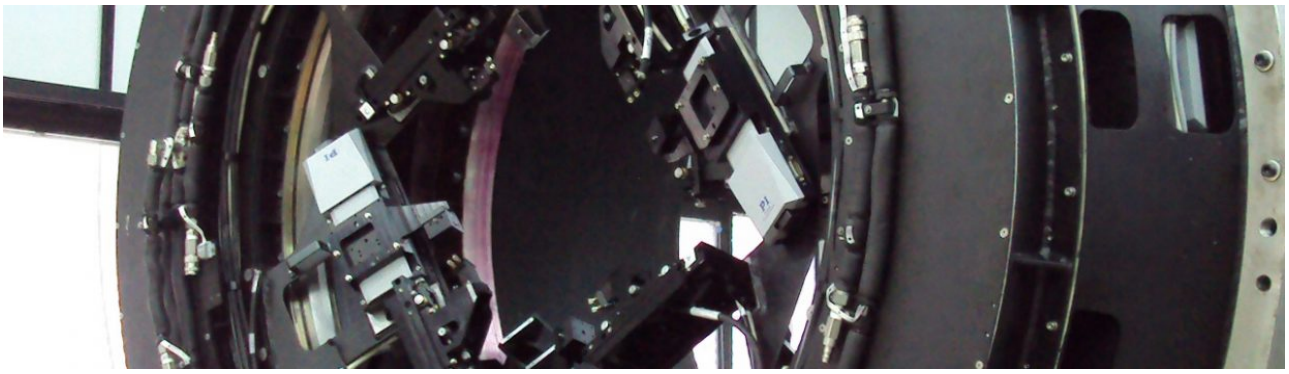
VLT GRAAL Main Assembly



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VLT GRAAL MAIN ASSEMBLY

País: Spain

GRAAL (GRound layer Adaptive optics Assisted by Lasers) is the adaptive optics module for the Hawk-I NIR imager and is aimed at upgrading a VLT 8m telescope to an Adaptive Telescope, providing turbulence corrected images at the foci.

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GRAAL Main Assembly height above 3m

Overall weight about 850 kg

- Aluminium and steel structures providing a light-weight, stiff and thermal controlled support for the different subsystems and electronic cabinets.
- A co-rotator, including a 1.1 m precision bearing, a torque drive and a multi-head angular encoder allowing angular tracking with an accuracy better than 10 arcsec rms.
- A cable guide system to trace all necessary signals from the fixed and mobile part of the co-rotator
- A set of wave-front sensors with positioning stages: 4 for tracking of laser guide-stars, 1 for tracking of a natural star and an additional one for maintenance and commissioning.
- A maintenance and commissioning mode arm and re-imaging optics
- A set of calibrators for the different assemblies.

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MAIN PARTS OF GRAAL