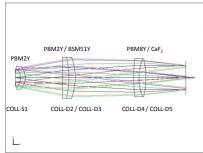
MEGARA Optics manufacturing Multi Espectrógrafo en GTC de Alta Resolución para Astronomía

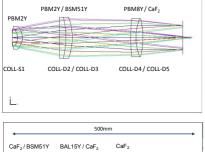
Carrasco, E.1; Páez, G.2; García-Vargas, M.L. 3; Sánchez-Blanco. E.3; Gil de Paz, A.; Gallego, J.4; Iglesias, J.M.5; Sánchez-Blanco. ¹INAOE (Puebla, México), ²CIO (Guanajuato, México), ³FRACTAL SLNE (Madrid, Spain), ³UCM (Madrid, Spain), ⁵IAA (Granada, Spain) ⁶UPM (Madrid, Spain)

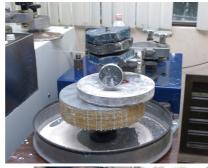
Abstract

We illustrate the optics manufacturing process for MEGARA the next optical Integral Field Unit (IFU) and Multi-Object Spectrograph (MOS) for the 10.4-m Gran Telescopio Canarias (GTC). INAOE is part of MEGARA Consortium and it is in charge of the Optics Manufacturing work package. MEGARA passed the Optics Detailed Design Review in May 2013, and some of the blanks have been already ordered, being in the point of starting the Optics manufacturing phase. Except for the optical fibers and microlenses (manufactured in Europe), the complete MEGARA optical system will be manufactured in Mexico, between the workshops of INAOE and CIO. This implies a field lens, a 5-lenses collimator, a 7-lenses camera and a complete set of VPHs with 36 flat windows and 24 prisms, being all these elements very large and complex. Additionally, the optical tests and the complete assembly of the camera and collimator subsystems will be carried out in Mexico.

Main optics

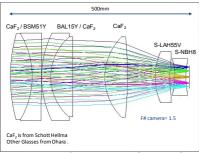




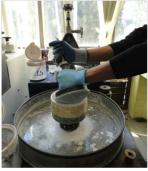




Diameter: 272mm







Dummy of COLL-S1 (aspheric) Diameter: 155mm



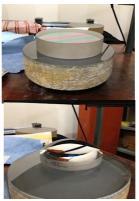
End of main optics: Sep-2014

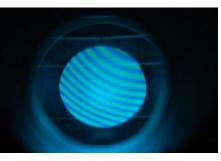




Testing by zones of a flat and a cx surfaces. Diameter: 272 mm









Follow us at: http://guaix.fis.ucm.es/megara megara_project



