

INSTRUMENTACIÓN ASTRONÓMICA

Natalia Lucía Oliveros Gómez



ALGO DE HISTORIA

Universidad
Industrial de
Santander



Nínive.



Aristófanes

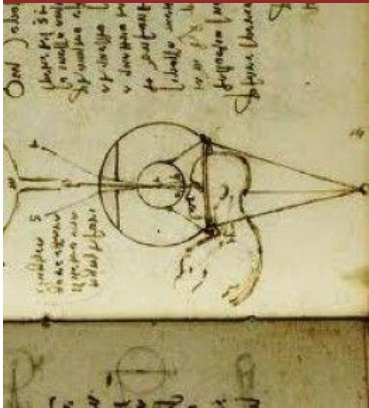
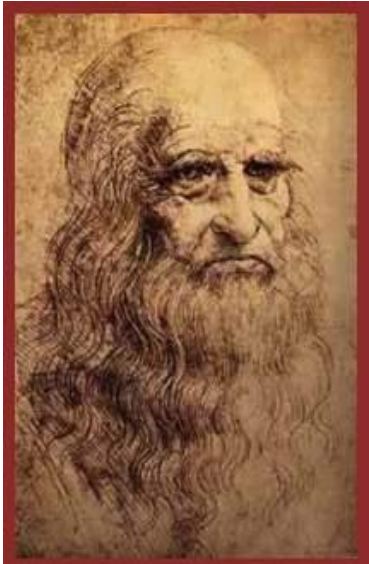


Piedras para leer

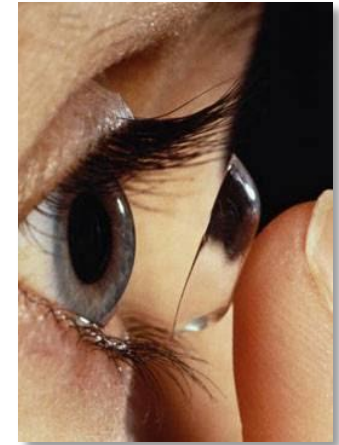
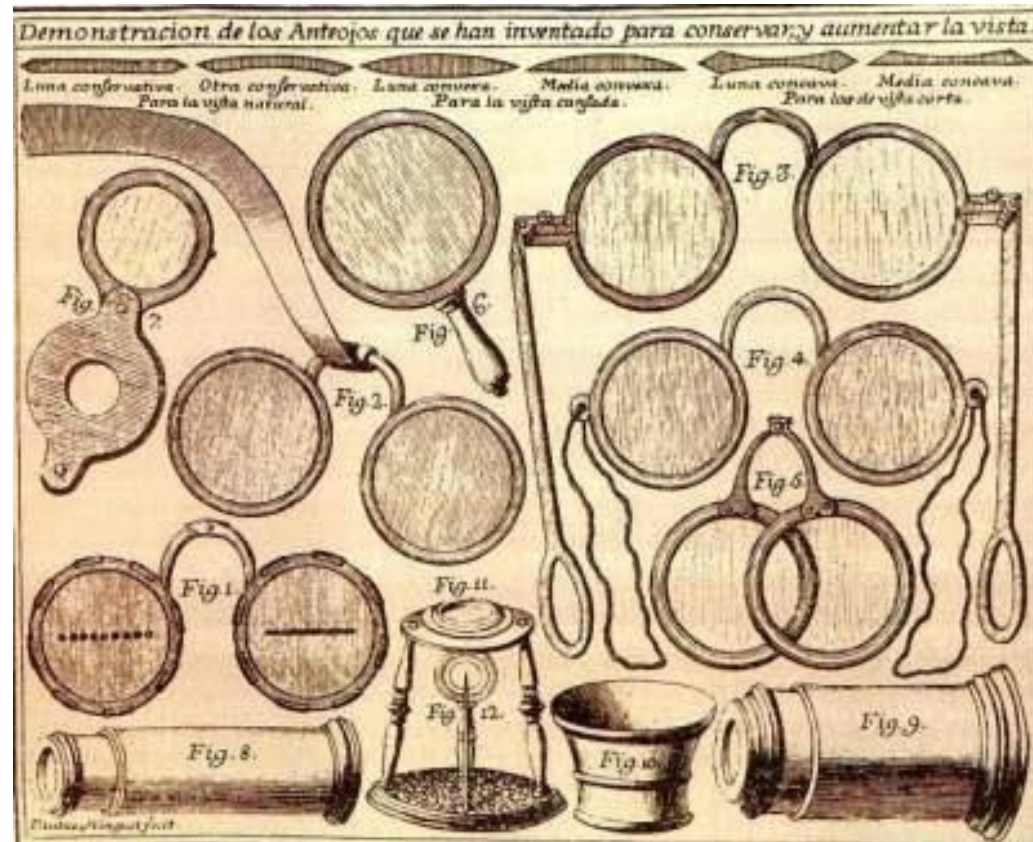


EN LA ÓPTICA

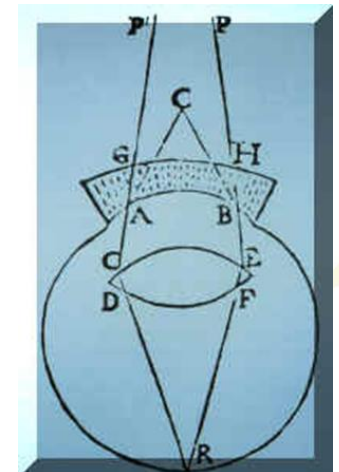
Leonardo Da Vinci



Alexandro della Spina o
Salvino de Armati



Hidrodiascopio



EL TELESCOPIO

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GALILEO

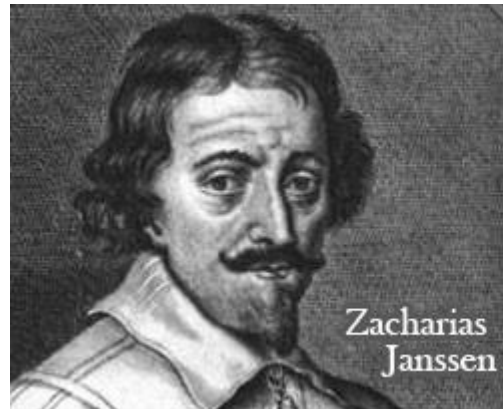
Telescopio de
30 aumentos.
Museo ciudad
de Florencia



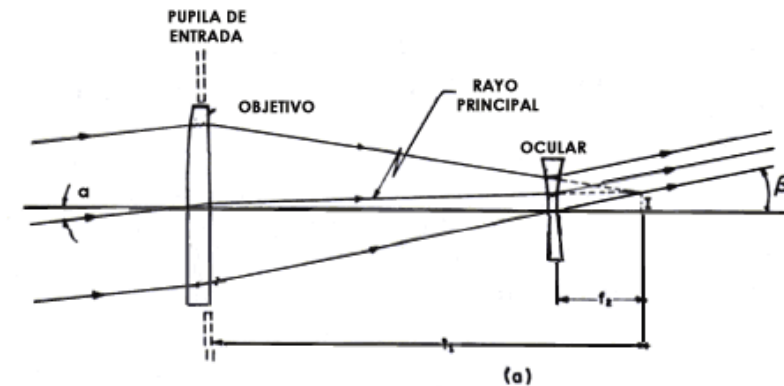
Giambattista della Porta
1589
De magiae naturalis



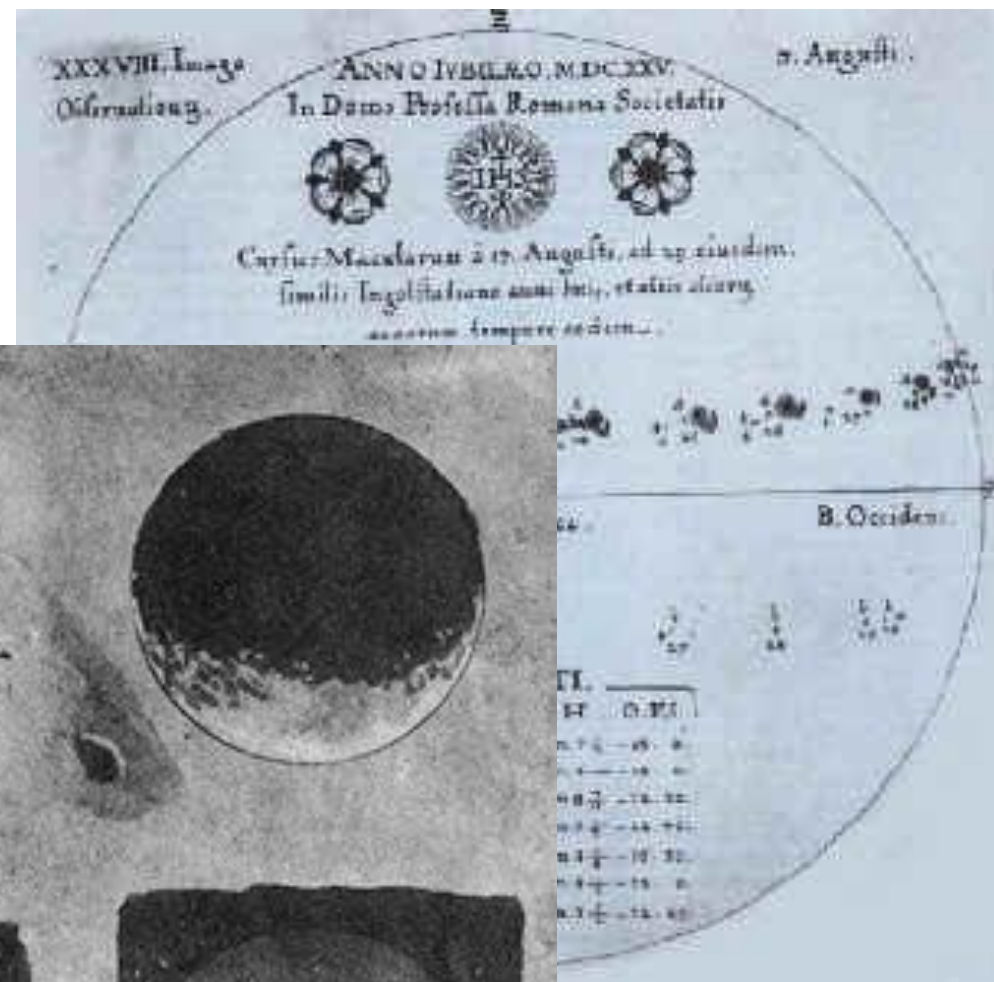
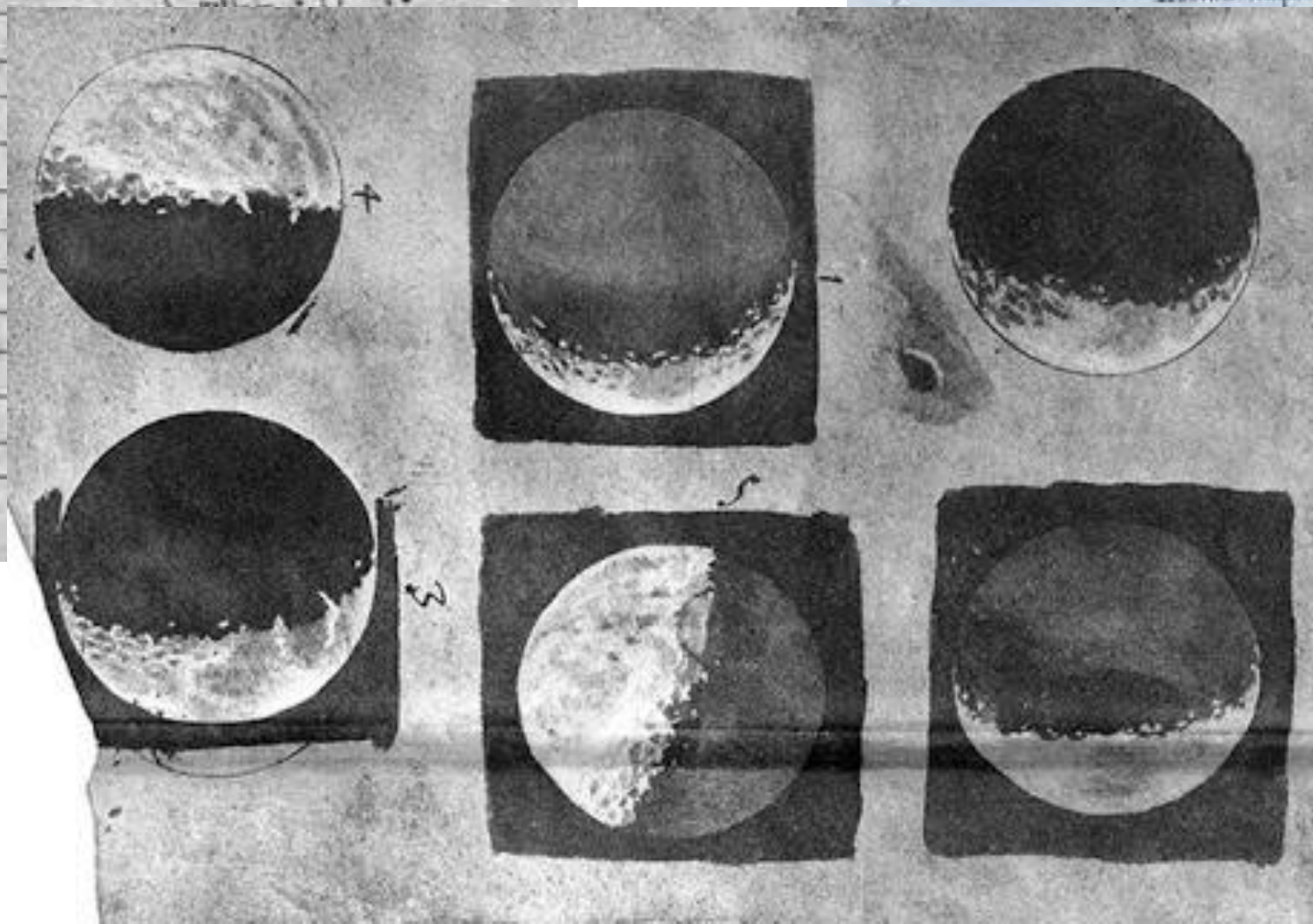
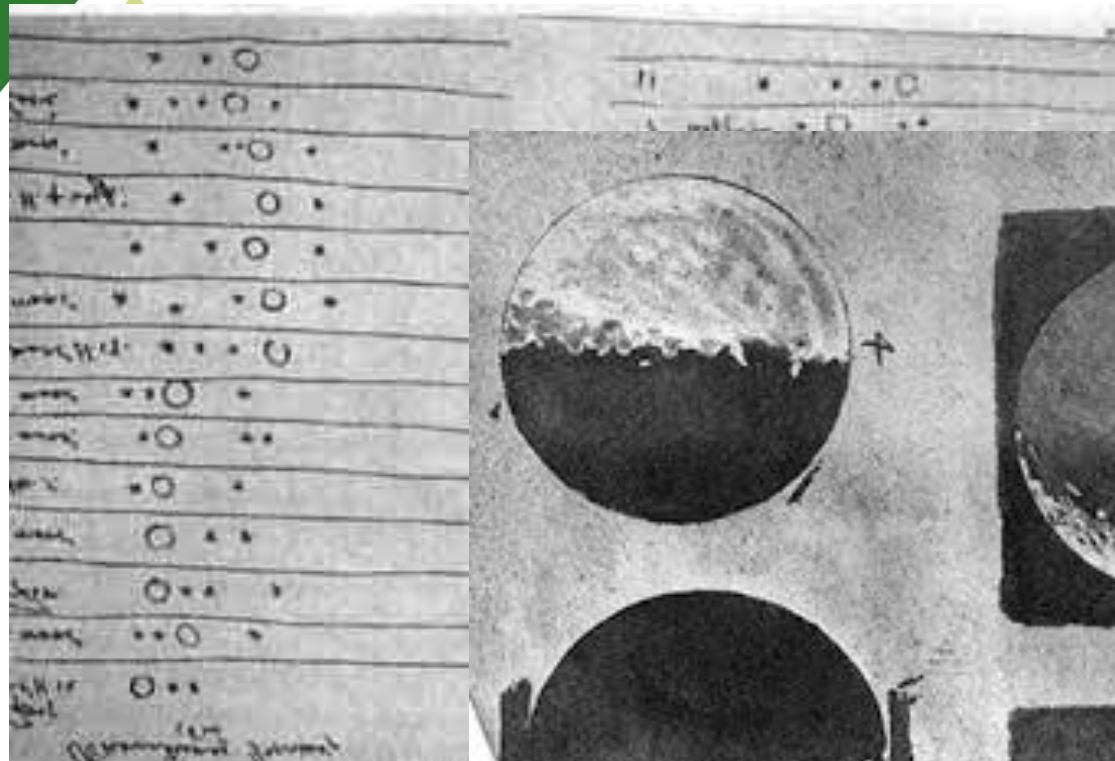
Holandés
Hans
Lippershey



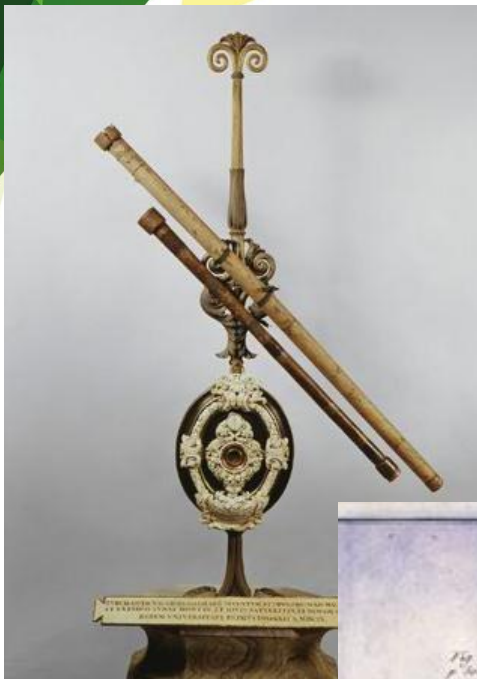
Zacharias Janssen
microscope (1608)



¿QUÉ VIÓ?



Antes

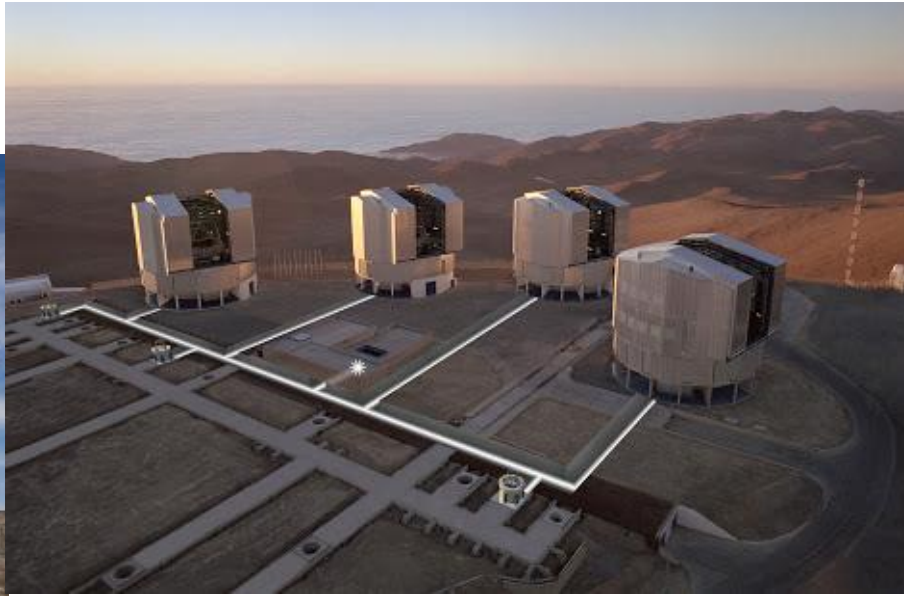


Ahora

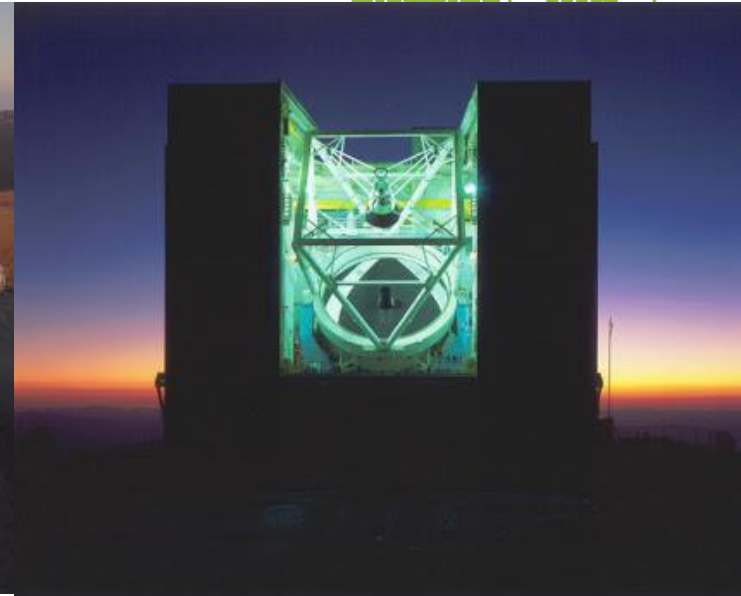
ALMA CHILE



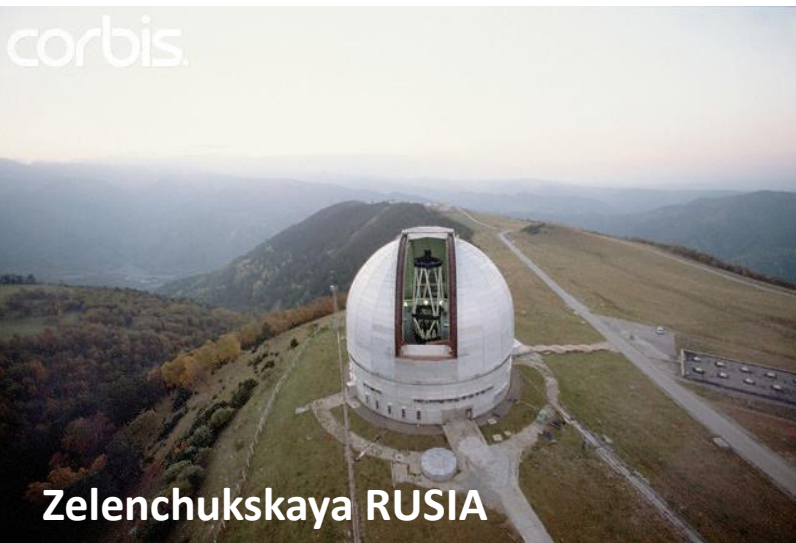
VLT CHILE



MMT ARIZONA



GTC (Canarias)



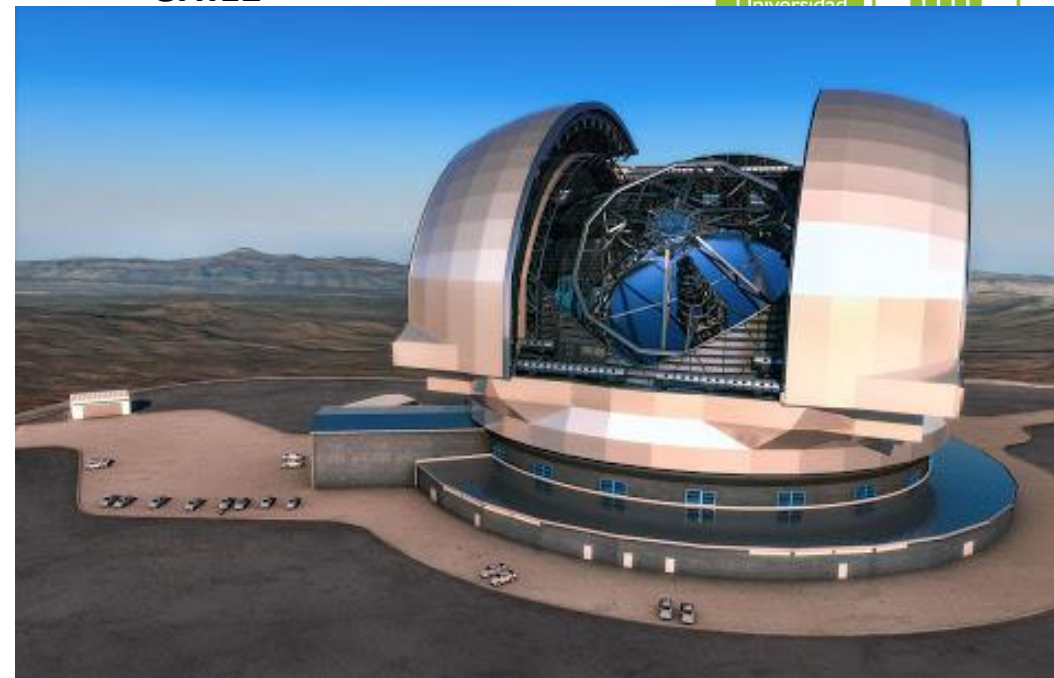
Zelenchukskaya RUSIA

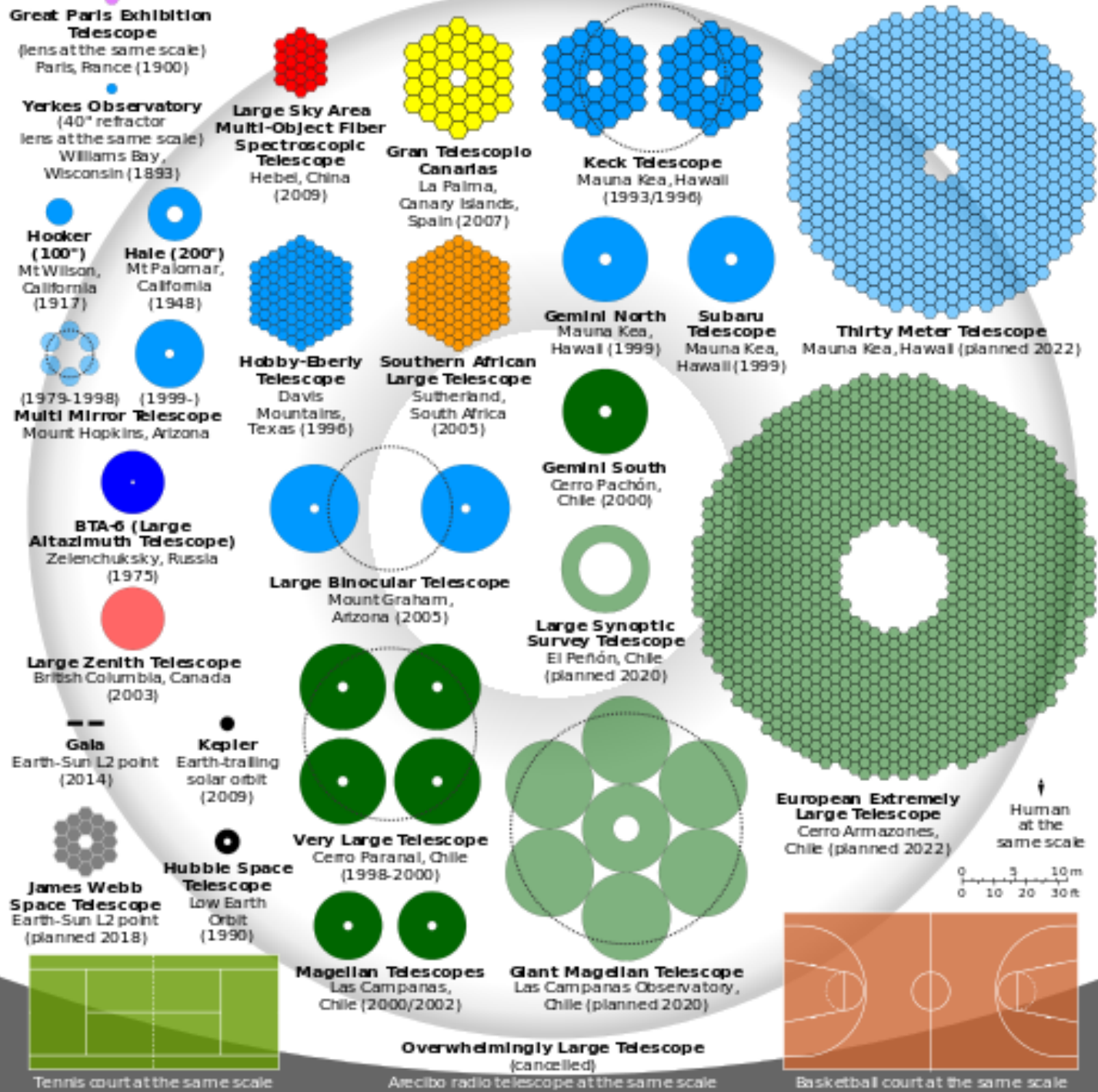


Proximamente



EELT (European Extremely Large Telescope) CHILE





Fred Lawrence Whipple
ARIZONA



Observatorios de Mauna Kea
HAWAII

Tener en cuenta

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Telescopio



Lentes



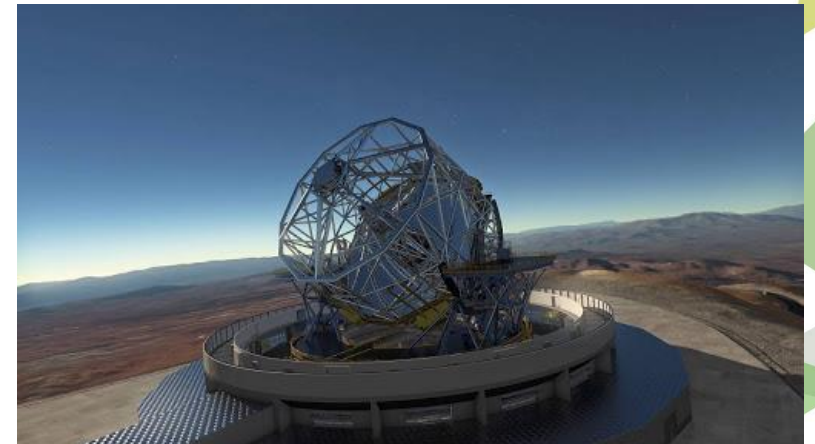
Espejos



Ocular



Objetivo

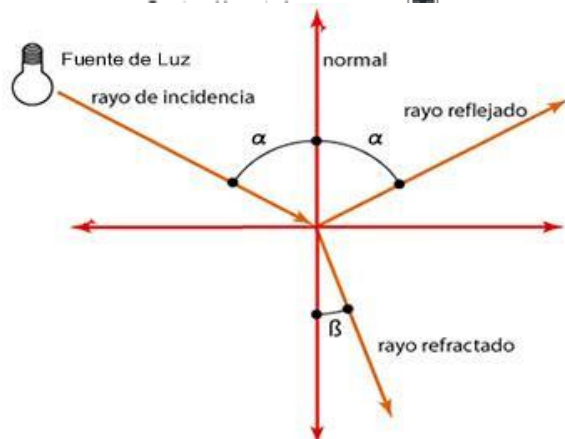
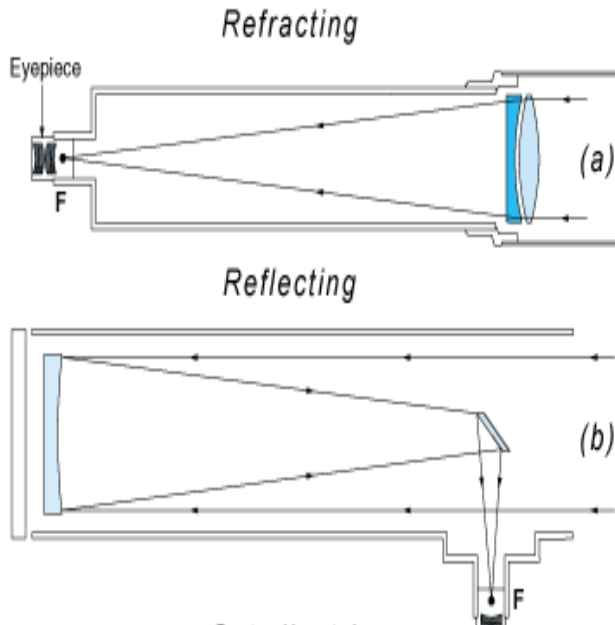


Partes del telescopio

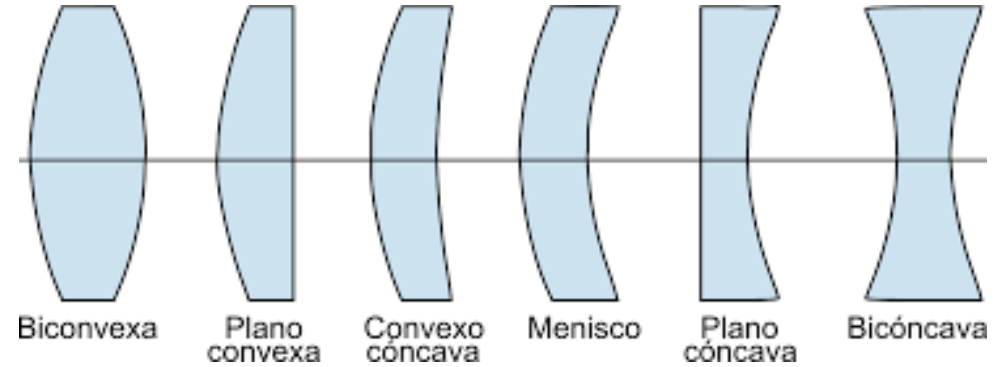


FUNCIONAMIENTO

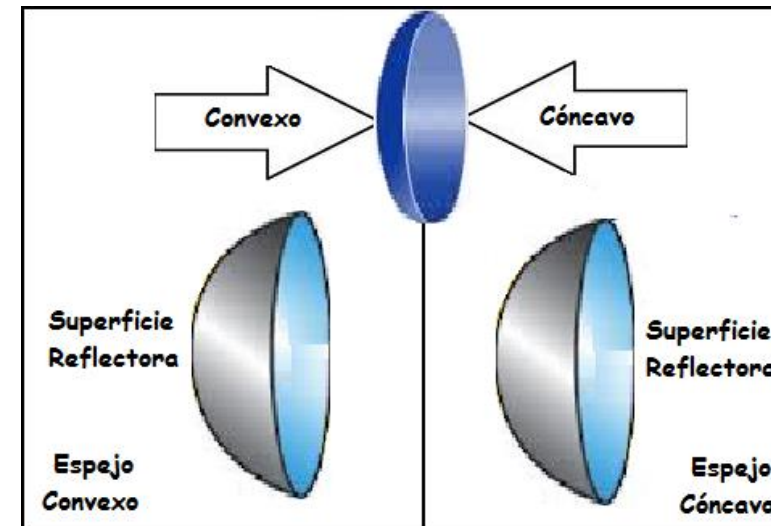
Reflexión y Refracción.



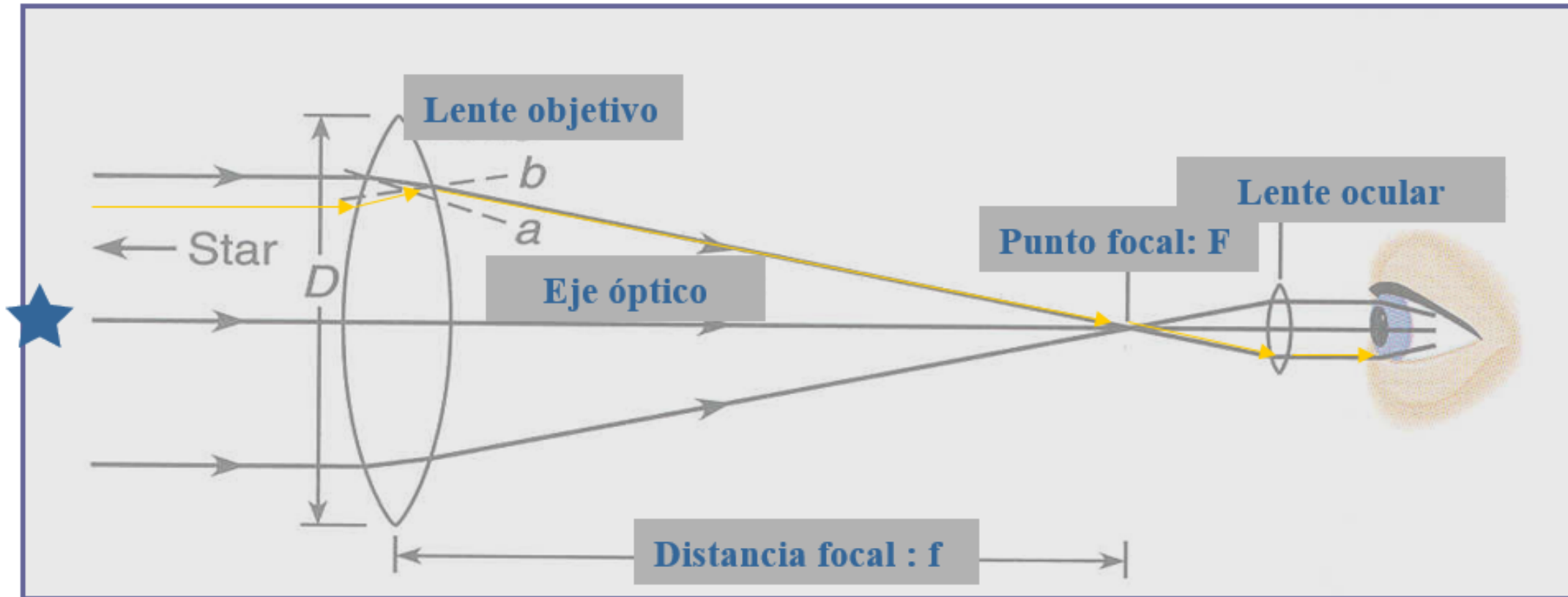
Tipos de lentes



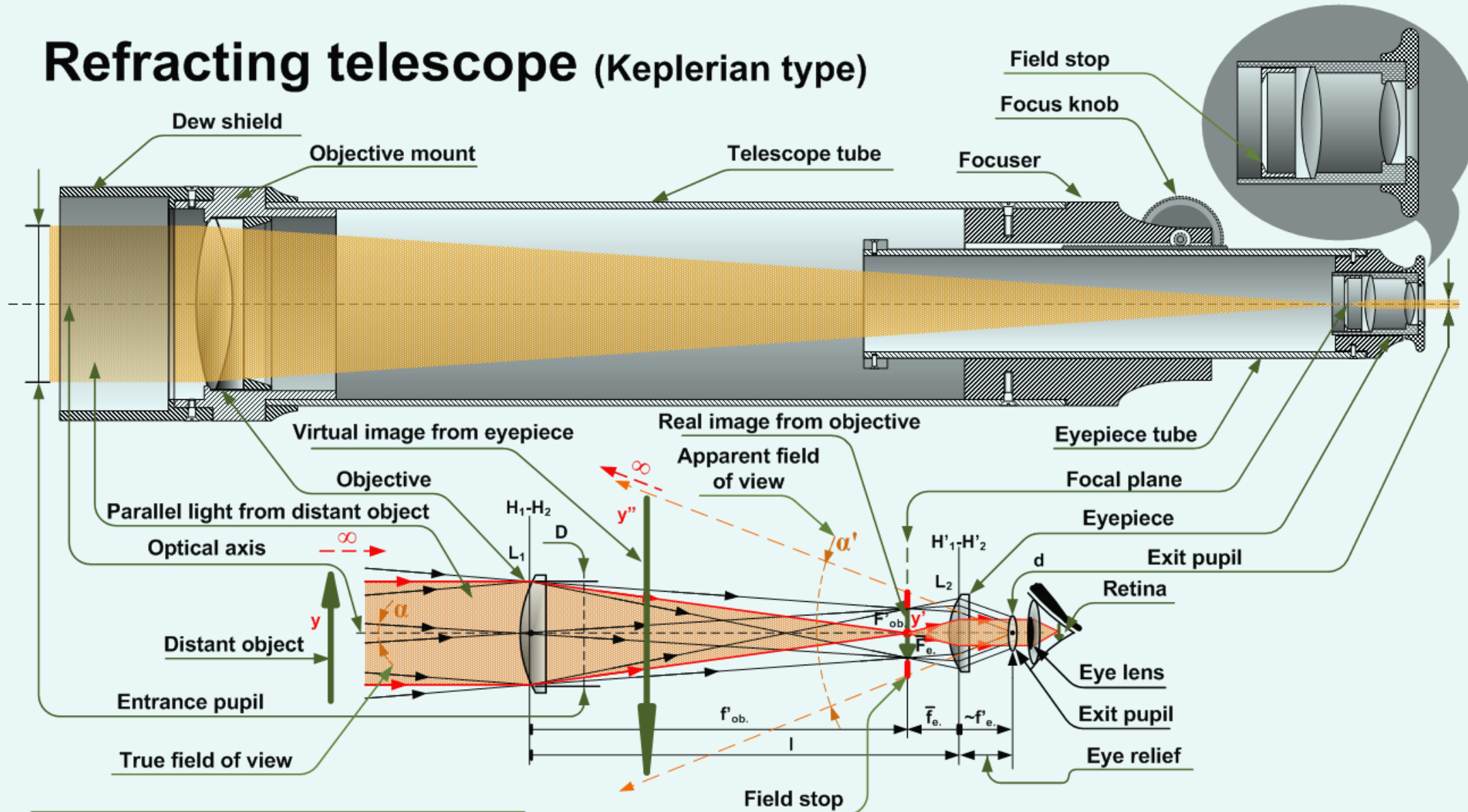
Tipos de espejos



REFRACTORES



Refracting telescope (Keplerian type)



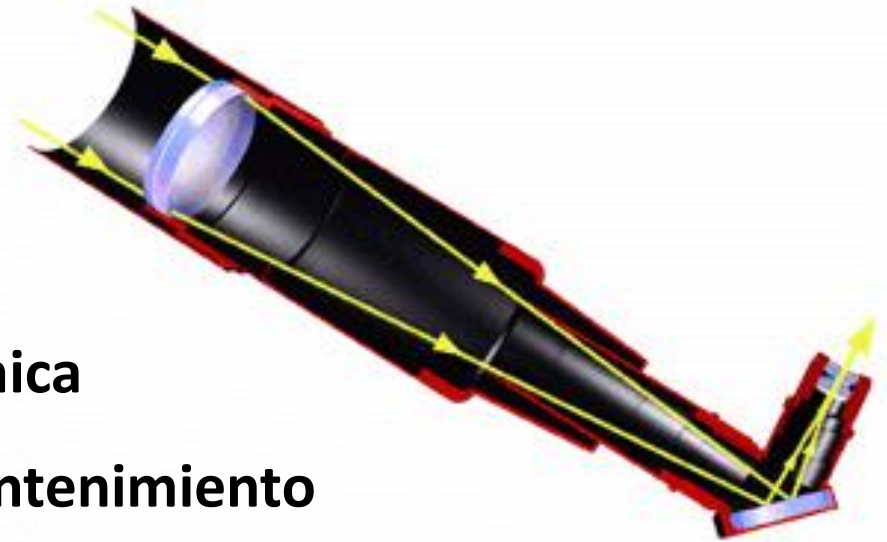
Telescope magnification: $M = \frac{tg\alpha'}{tg\alpha} = \frac{f'_{ob.}}{f_e} = \frac{D}{d}$

VENTAJAS VS DESVENTAJAS



Buena respuesta térmica

No requieren alto mantenimiento

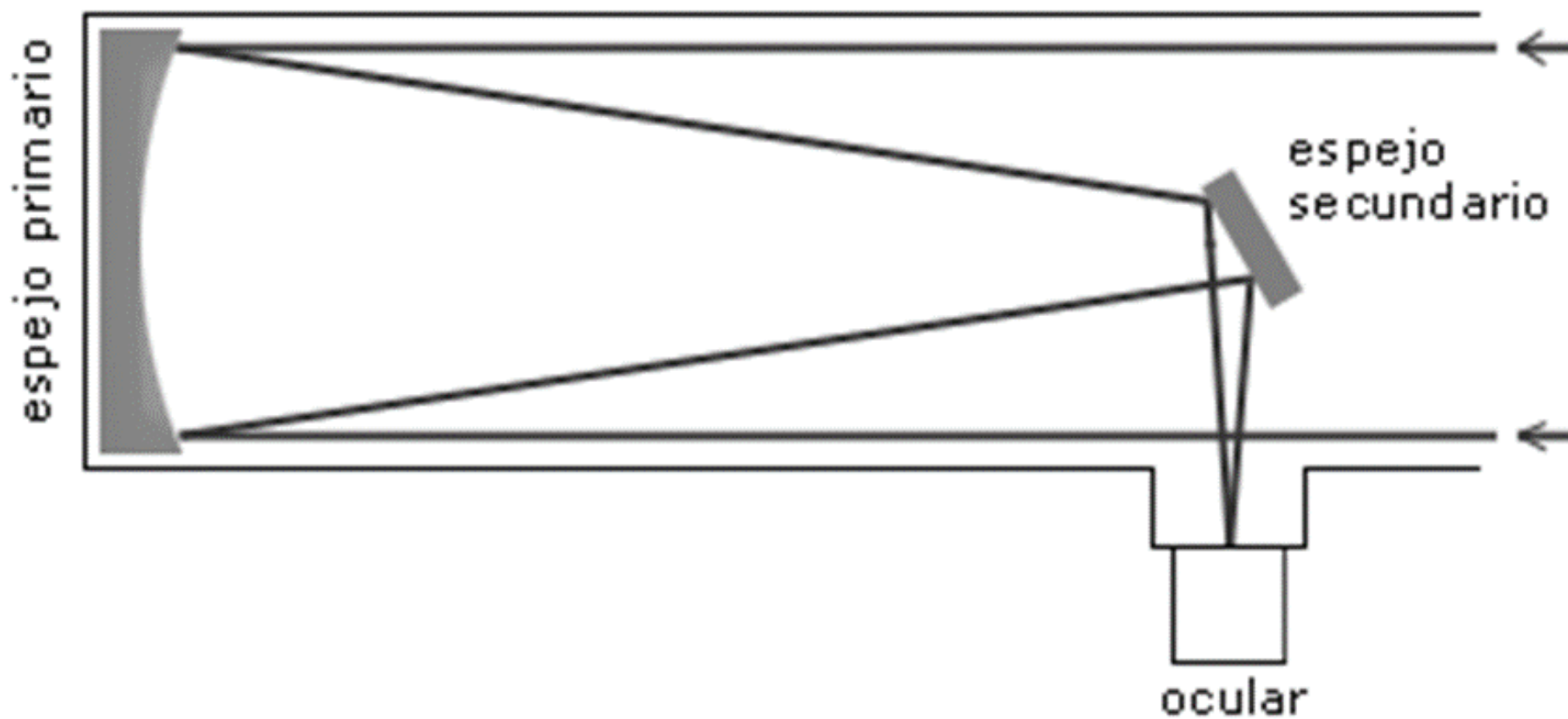


hay pérdidas adicionales de luz.

longitudes de onda cortas.

Las dimensiones

REFLECTORES



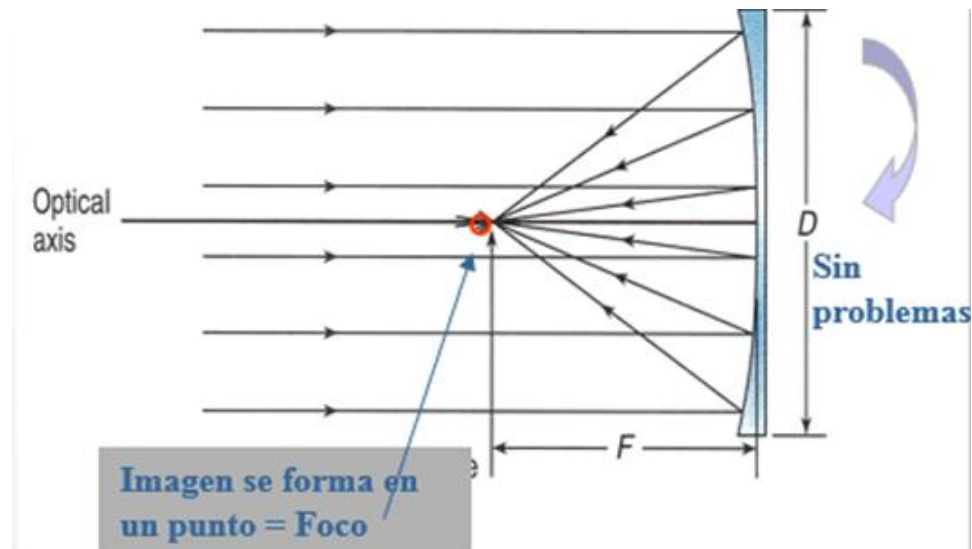
VENTAJAS VS DESVENTAJAS

Economía

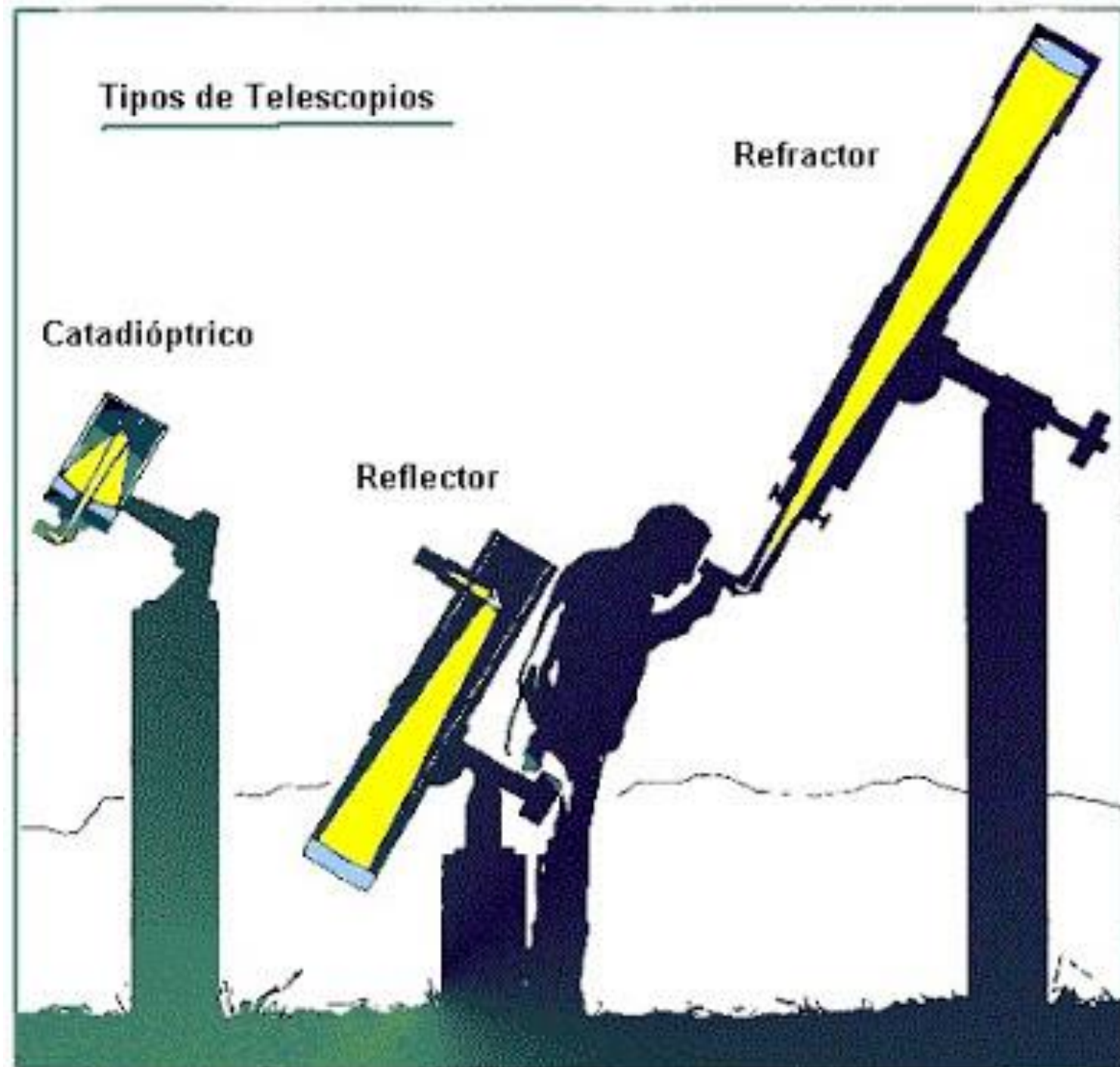
Resolución

calidad en la imagen

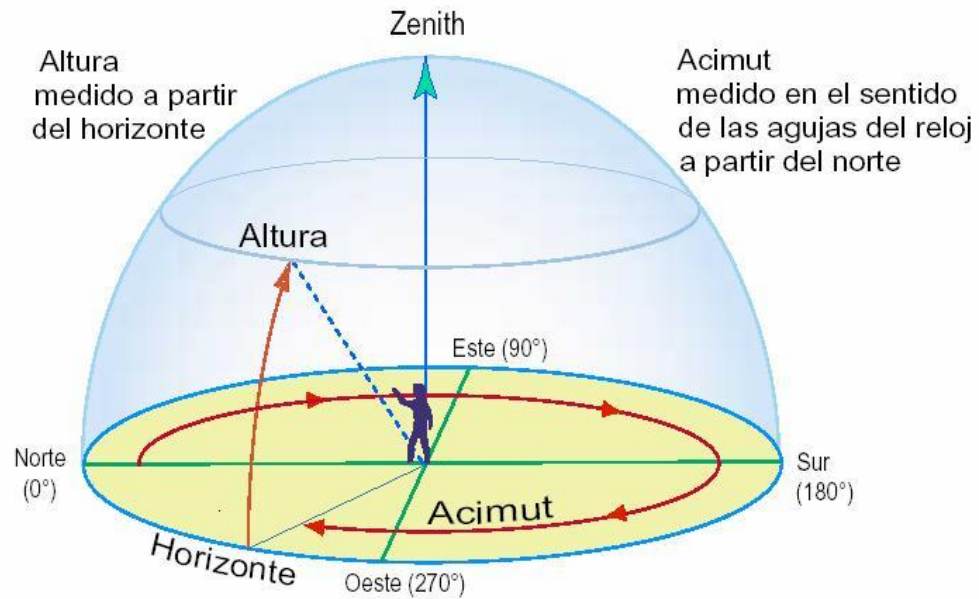
Mantenimiento



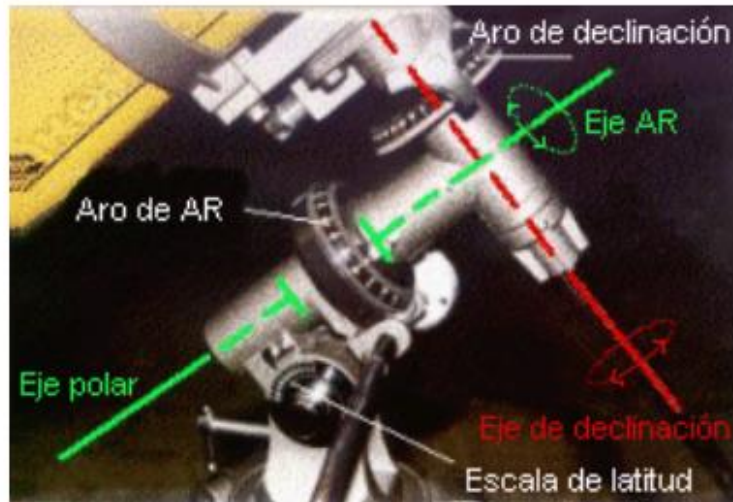
¿Cuál es mejor?



MONTURA AZIMUTALES



MONTURAS ECUATORIALES



Montura ecuatorial

