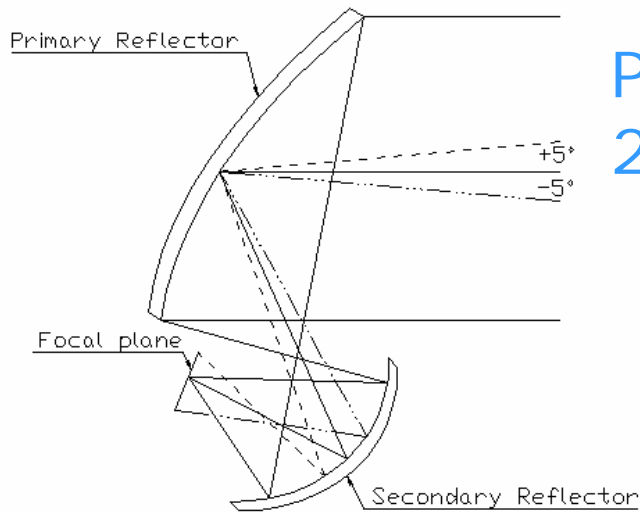


# Planck Reflector Programme

Principal Investigator:  
H.U. Nørgaard – Nielsen  
Danish National Space Institute (DTU Space)

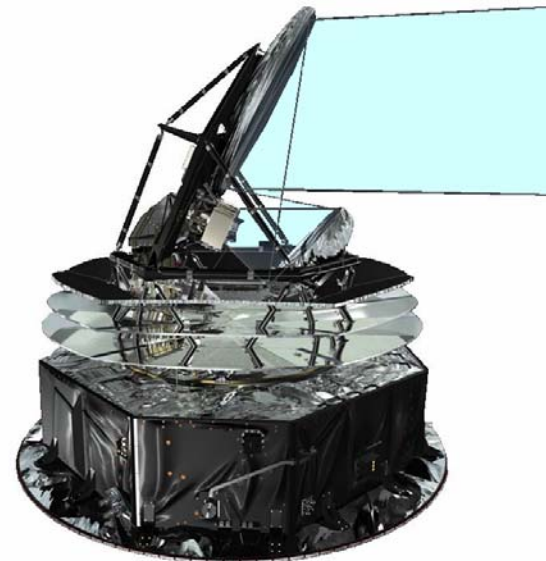
Reflectors build by ASTRIUM, Friedrichhafen  
under DTU Space and ESA contract





Planck reflectors:  
2 ellipsoids

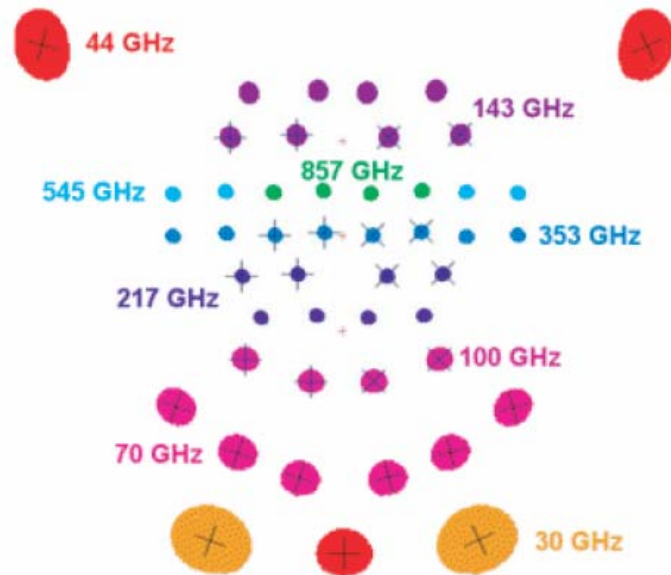
Design drivers:  
Mass, stiffness,  
thermal stability  
(RT -> -220 C)



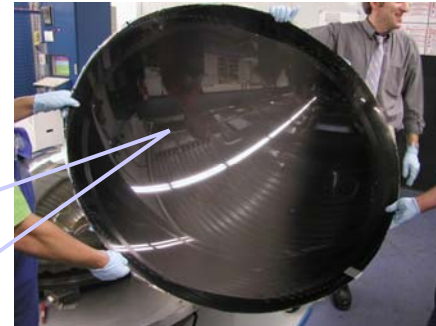
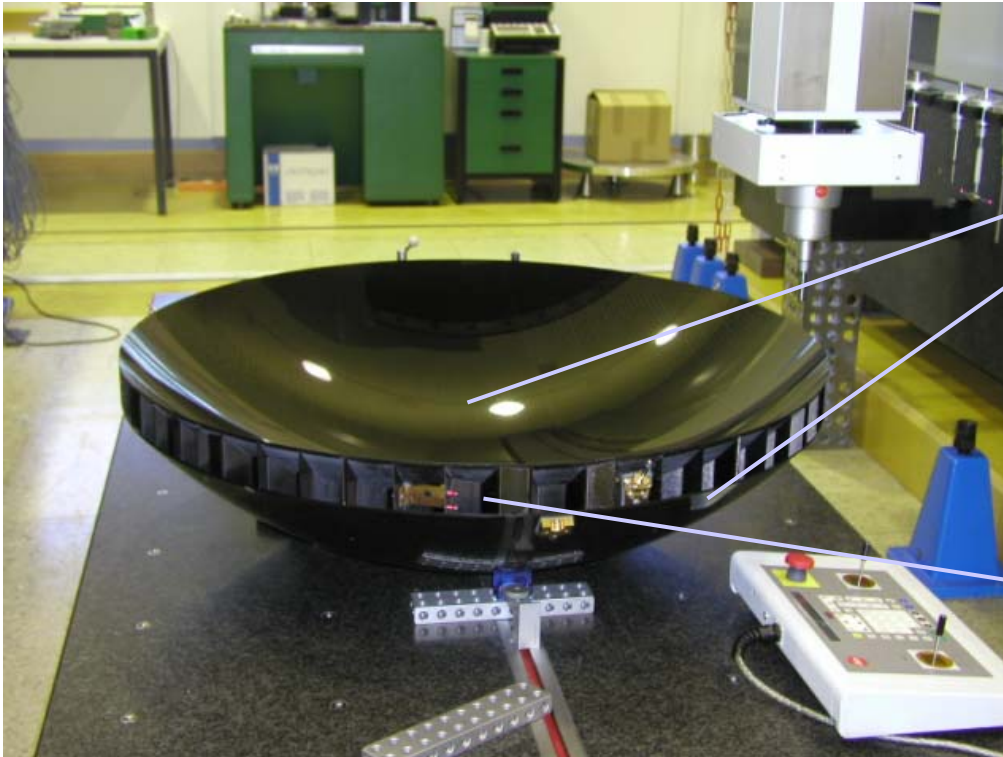
# PLANCK Reflector Programme



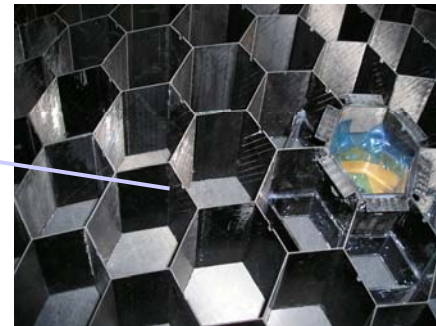
Field of View:  $\pm 4$  deg



## Planck Carbon Fiber Reinforced Plastic



Facesheet



Honeycomb structure

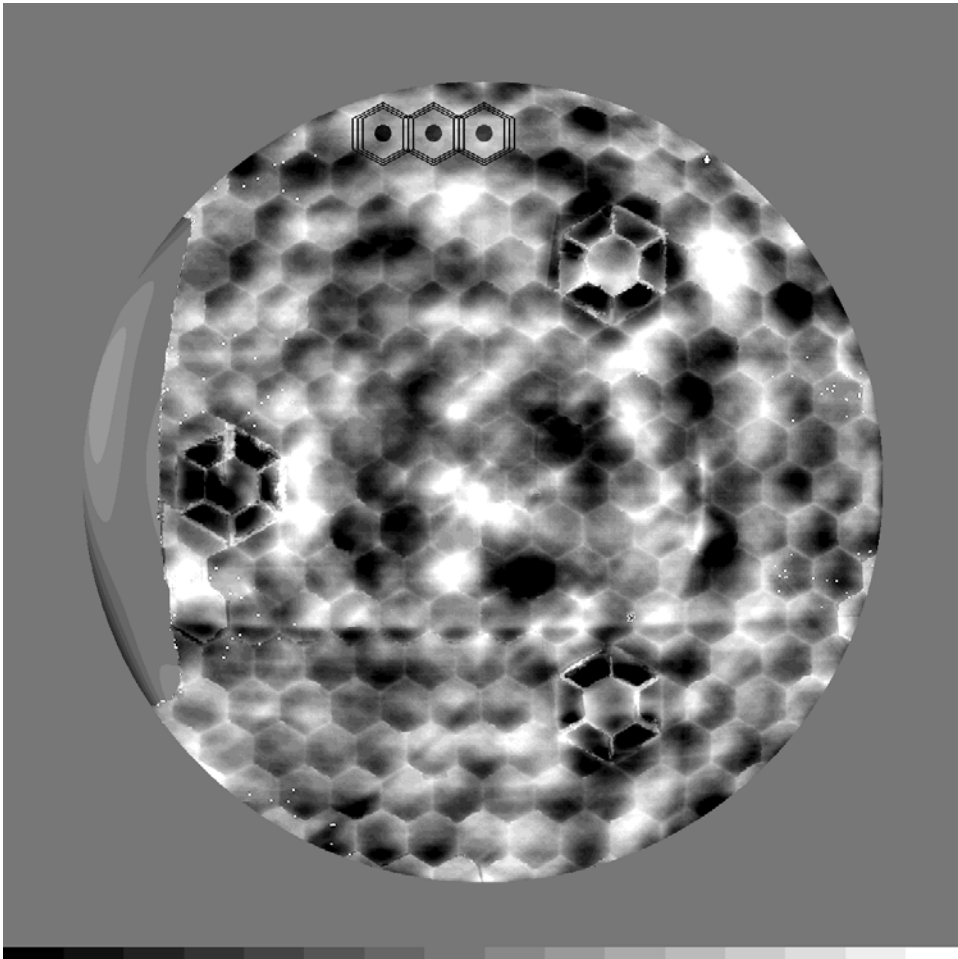


# PLANCK Reflector Programme



SR interferometry map 50 K

scale +- 10 10 micron



Extensive FEM calculations

Interferometer  
measurements at  
Centre Spatial de Liege

Secondary reflector  
Cool down: RT -> -220 °C





## Planck telescope



On ground tests and simulations of the optical performance will be checked through observations in orbit of Planets (e.g. Jupiter Mars)

