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### **Recoating the MLRO 1.5 m primary mirror**

The Matera Laser Ranging Observatory (MLRO) is based on a 1.5-meter diameter Cassegrain telescope which was built in 1995. The primary mirror had a UV-enhanced coating with a very high reflectivity; however, after 20 years, it had degraded significantly so a new coating had become necessary.

Due to the particular design of the telescope, the operation has been very carefully planned by e-Geos and, in order to avoid risks, we decided to do everything on site. L3 Communications (formerly Brashear-Contraves, the builders of the telescope) directed all aspects related to the movement of the 1-ton mirror, while ZAOT (Italy) did the recoating in a vacuum chamber which was erected at the Matera site. The poster illustrates all the phases of the operation.