Contribution ID: **3** Type: **not specified**

Next-generation laser microreflectors for the whole solar system

Tuesday, 14 June 2016 16:15 (35 minutes)

Since 2004 the SCF_Lab has developed innovative laser retroreflector designs, unique procedures and facilities for laser retroreflector performance characterization. This activity was devoted mainly to radio-navigation satellites (like Galileo) and the near side of the Moon. In recent years, however, we conceived novel and miniaturized retroreflector models to support space sciences and space exploration for a large variety of destinations and missions in the whole solar systems: the far side of the Moon, Mars, Phobos/Deimos, Jupiter/Saturn icy/rocky moons (like Europa, Ganimede, Enceladus), asteroids (like Bennu and the Didymos binary system) and comets (like 67P/Churyumov Gerasimenko, the one visited by the Rosetta mission of ESA-ASI).
Adapting reflector performances to these different space destinations and missions, required (and still does) the SCF_Lab group to work on geometries, materials, construction and assembling procedures; always considering the rigorous space qualifications imposed by space agencies (ExoMars docet).

Presenter: SALVATORI, Lorenzo (LNF)