

**THE INTERNATIONAL LASER RANGING SERVICE: PAST, PRESENT, AND FUTURE.** G. Bianco<sup>1</sup>, M. Pearlman<sup>2</sup>, <sup>1</sup>Agenzia Spaziale Italiana, Centro Geodesia Spaziale, P.O. Box 11, 75100 Matera, ITALY, giuseppe.bianco@asi.it. <sup>2</sup>Harvard-Smithsonian Center for Astrophysics, 60 Garden St., Cambridge MA 02138, USA, mpearlman@cfa.harvard.edu.

**Abstract:** The paper will review the role and the history of the ILRS, highlighting many of the changes that we have seen in the network, the technology, the missions (and associated support of science areas), the analysis, the procedures, the retroreflector arrays, and operations over the tenure of the Service. The institution of the ILRS Service brought about changes that have led to improved operations, expanded collaboration between isolated international groups, provided a conduit for information and idea exchanges, eliminated redundancy and unwarranted duplication of efforts, streamlined the collection, quality control and archival of all data and products, and eventually resulted in considerable improvement in the quality and quantity of SLR/LLR-based data products. Despite the unquestionable growth over the past two decades, there is still a lot of room for improvement and expansion, so this presentation will discuss the path forward that we foresee for laser ranging and the issues and obstacles that we will need to address and overcome in the near future. While the focus is on our technique—laser ranging, we also need to recognize the importance of collocation with the other geodetic techniques that will be essential as data product requirements become more stringent and as we attract new customers