

Transponder Working Group Agenda

October 26, 2015 19:00 – 20:00

(1) Update on behalf of Jan McGarry on any new scientific or engineering results from the NASA MLA, MOLA and LOLA experiments since the last Transponder WG meeting (J. Degnan)

(2) Common View Time Transfer and Cross System Ranging (J. Eckl)

(3) ELT: European Laser Time Transfer Experiment (U. Schreiber)

(4) Simulation experiments for interplanetary transponder and communications and what it can do for the ILRS (J. Degnan)

Background: Since the success of the 622 MByte Moon-Earth link, laser communications is becoming a popular topic. Starting from the simulation experiments for interplanetary transponder and communications we first discussed many years ago using existing SLR space assets and encourage ILRS members to perform or support such experiments to fine tune their designs prior to an actual space mission. What is the best route to encourage future lunar and interplanetary missions carrying laser sensors (e.g. Bepi-Colombo, OSIRIS-Rex, Juno, etc.) to perform similar side experiments, enroute to or at their final destination, to advance the cause of interplanetary ranging, time transfer, and laser communications.

(5) Intersystem comparison module DART: What is the potential? (G. Kirchner)