

**CONCEPT FOR A GEODETIC AND TIME REFERENCE IN SPACE.** A. Schlicht<sup>1</sup>, U. Hugentobler<sup>1</sup>, M. Stetter<sup>2</sup>, W. Schäfer<sup>3</sup>, <sup>1</sup>FESG, Technische Universität München, Arcisstr. 21, 80333 München, schlicht@bv.tum.de, <sup>2</sup>Institut für Astronomische und physikalische Geodäsie, Technische Universität München, Arcisstr. 21, 80333 München, <sup>3</sup>TimeTech, Curiestr. 2, 70563 Stuttgart, Wolfgang.Schaefer@timetech.de.

**Introduction:** Data transfer as well as time transfer and ranging in space are carried out by free propagating modulated electromagnetic signals. In principle all three tasks can be done with the same link equipment and the same signal. To make use of this synergy a common concept for all three applications has to be developed together with adapted instruments. In this talk we introduce such a common concept and discuss the areas of application and benefits for geodesy. We show how satellite laser ranging stations are integrated in this concept and which duties and chances emerge from such a concept. The discussed benefits range from access to extended tropospheric monitoring at the tracking stations as a step to reach the demands for a GGOS station.

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