



Contribution ID: 112

Type: **Poster Presentation**

## Aspects of relativistic geodesy within the framework of VLBI and VGOS

*Monday, 14 March 2016 17:00 (1 hour)*

Relativistic geodesy is typically seen as a new type of gravity potential measurement technique using very high accuracy clocks; these clocks are more stable (by a factor of 100 or 1000) than the hydrogen masers currently used at VLBI stations. In modern terms however, geodesy entails much more than just geodesy of the Earth, therefore the term relativistic geodesy is re-assessed. The possible contributions of VLBI stations in the framework of GGOS using VGOS antennas and modernized geophysical and timing equipment are described. Time transfer using VLBI and GNSS, integrated geodetic systems, future space based missions and Lunar missions all have a roll to play in a relativistic geodesy which extends to the solar system and beyond. Instrumental and network requirements are considered, error sources and error budgets are discussed.

**Primary author:** Prof. COMBRINCK, Ludwig (HartRAO)

**Presenter:** Prof. COMBRINCK, Ludwig (HartRAO)

**Session Classification:** Poster4-6

**Track Classification:** 5: Geodetic and Astrometric VLBI Results