
Relativistic reference systems and time scales for all solar system bodies using the IAU 2000 framework

Sergei Klioner*¹

¹Lohrmann-Observatorium, Technische Universität Dresden – 01062 Dresden, Germany

Abstract

The IAU 2000 framework for the relativistic astronomical reference systems provides definitions of both the global reference system (BCRS) and a local reference system. The immediate application of the local reference system is to define the GCRS: a physically adequate reference system for the Earth. However, the same definition of the local reference system can and should be used for any other massive body in the Solar system. In this presentation the corresponding relativistic reference systems and time scales will be discussed considering Moon and Mars as examples.

*Speaker