

Optically Steered Time Scale Generation at OP and NPL and Remote Comparisons

Tuesday, 17 October 2023 11:30 (30 minutes)

We will present real-time optically steered timescales generated at the same time at OP and NPL. After a detailed description of the experimental chains, we will present the implemented algorithms for outlier filtering and frequency steering estimations. We will then analyse the performance of the experimental timescales based on local comparison against the local UTC(k) and remote comparisons performed via UTC and using the GPS Precise Point Positioning (PPP) technique, before presenting strategies for improvement.

Primary authors: ABGRALL, Michel (LNE-SYRTE, Observatoire de Paris); JOHNSON, Matthew (NPL); MARGOLIS, Helen (N); LE TARGAT, Rodolphe (LNE-SYRTE); GODUN, Rachel; Dr UHRICH, Pierre (LNE); SCHIOPPO, Marco (NPL); Dr LORINI, Luca (LNE-SYRTE, Observatoire de Paris); LODEWYCK, Jérôme (LNE-SYRTE Observatoire de Paris); PARSONS, Adam (National Physical Laboratory); TOFFUL, Alexandra (NPL); TRAN, An (NPL); CURTIS, Anne; CHUPIN, Baptiste (Observatoire de Paris-PSL, CNRS, SU, LNE); POINTARD, Benjamin (LNE-SYRTE); Dr ROBERTSON, Billy (National Physical Laboratory); FENG, Chen-Hao; HILL, Ian (National Physical Laboratory); TUNESI, Jacob (NPL)

Presenter: ABGRALL, Michel (LNE-SYRTE, Observatoire de Paris)

Session Classification: SI Definition, Clocks and Time Scales I

Track Classification: SI definition, Clocks and Time Scales