

SP6: Advanced laser synchronization at REGAE

Thursday 14 July 2016 15:45 (3 minutes)

Mach-Zehnder Modulator (MZM) based laser-to-RF synchronization setup has been built and commissioned at REGAE. Titanium sapphire laser oscillator has been locked to the 3 GHz RF reference. Long term timing drift performance of the laser synchronization has been measured. Results show outstanding locking performance of 31 fs peak-to-peak over 40 hours of measurement time.

Primary author: Mr TITBERIDZE, Mikheil (DESY)

Presenter: Mr TITBERIDZE, Mikheil (DESY)

Session Classification: Session 2: Stability, Control and Synchronisation