

### 3. Annual MT Meeting



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## Femtosecond Level Laser Synchronization at REGAE

*Tuesday 31 January 2017 19:03 (3 minutes)*

Relativistic Electron Gun for Atomic Exploration (REGAE) is a unique accelerator, capable of producing ~ 10 fs long electron bunches. These bunches are used for Ultrafast Electron Diffraction (UED) experiments in a pump-probe configuration. In order to conduct precise pump-probe experiments one has to ensure femtosecond level laser synchronization. This poster presents advanced Mach-Zehnder Modulator based laser-to-RF synchronization setup realized for Titanium Sapphire laser system and corresponding measurement results.

### Topic (ARD or DTS)

ARD

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