Contribution ID: **175** Type: **Poster Presentation**

Femtosecond amplifier pulse characterization: FROG and shaper-assisted techniques

Thursday, 14 July 2011 17:00 (2 hours)

<p>We present pulse characterization of various amplified shaped pulses, using second harmonic autocorrelation, frequency resolved optical gating (FROG), as well as their analogue techniques using only the pulse shaper and no moving parts in the experimental setup. This involves creating double pulse seperations using the pulse shaper only and recording the resulting SHG autocorrelation and FROG signals. Pulse shaper assisted characterization is presented in detail for our setup which includes an acousto-optic programmable dispersive filter (Dazzler) coupled with a Matlab program incorporating pulse energy stabilization to compensate for shaper efficiency changes.

Level (Hons, MSc,
   PhD, other)?

PhD

Consider for a student
   award (Yes / No)?

Yes

Would you like to
 submit a short paper
 for the Conference
 Proceedings (Yes / No)?

Yes

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