

Maximum amplification and single amplified pulse selection in the  
amplifiers chain

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Abstract

Maximum amplification and single amplified ultra-short laser pulse selected from a three stages four passes amplifiers chain will be presented. The configuration of the amplifiers chain need to be set up and aligned to avoid the inter-stages reflection. The amplified spontaneous emission pulse shape as well as the synchronization between the pumping pulse and the seed pulses train can be optimized to have maximum amplification and a single amplified pulse only. The amplification results and the detail analysis will be presented.

Keyword : Single amplified ultra-short laser pulse, maximum amplification, amplifiers chain, synchronization,