

Final ID: JTh3A.29

Interferometric Spectral Modulation of sub-100-fs Pump Pulses for High Chemical Contrast, Background Free, Real Time CARS Imaging

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Abstract (35 Word Limit): A simple, fast interferometric spectral modulation technique is proposed for nonresonant background suppression during CARS imaging. We demonstrate that the proposed setup is also suitable for real time stain-free histopathology of the brain.