

# WhiteLase Supercontinuum Lasers: High Power Ultra-Broadband Light Sources

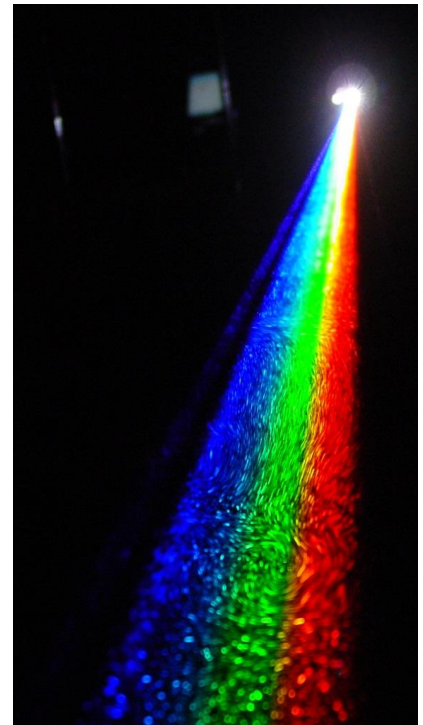
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Fianium - Ultrafast Fiber Lasers

Friday, Oct. 12 at 2:30pm

EE117

Supercontinuum lasers are a relatively new technology that provides spectral coverage from 400nm to well over 2 microns similar to lamp sources, but with extremely useful characteristics that are limited to laser sources. Unlike conventional broadband sources such as incandescent or halogen lamps, supercontinuum lasers are coherent broadband sources and can thus focus down to diffraction-limited spot sizes less than one micron and provide many orders of magnitude higher power densities than lamps. These features are monumentally important for investigation and interrogation of samples such as single molecules, nanomaterials, metamaterials, photonic crystals, waveguides, nonlinear absorption, and many more. Supercontinuum lasers are also picosecond pulse laser sources, and such short pulsewidths provide the capability for lifetime study applications like cavity ring-down spectroscopy and fluorescence lifetime. In this seminar we will provide an overview of how supercontinuum generation works and outline some of the vast array of applications that can and have benefitted from the sources in recent years.



Fianium has been the leading worldwide manufacturer of supercontinuum lasers since 2005 and offers 200mW to 8W sources with spectral coverage from 400nm to well over 2 microns with spectral power densities up to 4mW/nm. Fianium also offers a vast array of single-wavelength ultrafast fiber laser sources. These products consist of high-energy picosecond and femtosecond fiber lasers for microprocessing applications, high average power picosecond and femtosecond lasers, and 355nm and 266nm UV lasers.

