

131. Title: Generation of Flat Optical Frequency Comb Based on FM Laser Operation of Fiber Ring Laser

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Abstract: We obtained flat optical frequency combs by using the FM laser operation of a fiber ring laser and external intensity modulation. Extremely wide FM spectra can be easily obtained by the moderate internal phase modulation of an FM laser. We used an external intensity modulator to extract a linearly chirped part from the FM light in order to obtain flat spectra. In our experiments, we obtained a flat optical frequency comb with a spectral bandwidth of about 0.5 THz and a power deviation of less than ± 1.5 dB.