**Generation of a spectral comb of highly chirped pulses**

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A new approach for generating a broadband coherent spectrum by mixing of two frequency-shifted highly-chirped dissipative solitons in a highly-nonlinear fiber is demonstrated. In the experiment that was arranged on the basis of numerical simulation results, up to eight equidistant components in the interval of more than 300 nm were observed. They formed a comb of highly chirped pulses in the spectral domain. New pulses were mutually coherent, and each of them could be compressed down to hundreds femtoseconds. This approach, being different from traditional frequency combs, can inspire new developments in fundamental science and applications, such as few-cycle/arbitrary-waveform pulse synthesis, mid-IR and THz generation, coherent biomedical imaging and microscopy, and communications based on the superchannel technology.

**Публикации:**

2. Подивилов Е.В., Харенко Д.С., Беднякова А.Е., Федорук М.П., Бабин С.А. Генерация спектрального комба чирпованных импульсов // ВКВО 2017 (Пермь, 3-6 октября 2017 г.), А4-1 (прил. доклад).
