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Resonant dispersive waves generated with multi-input femtosecond pulses¹ KAI WANG, JIAHUI PENG, TAMU, ALEXEI SOKOLOV, ULTRA-FAST TEAM — We investigated the resonant dispersive waves generated by high-order dispersion theoretically. We considered two femtosecond pulses propagating in the kagome-lattice hollow-core photonics crystal fibers with different wavelength and time delay. With a phase difference, besides the two resonant dispersive waves produced by the third and fourth order dispersion, the other resonant dispersive wave in the visible range is generated in numerical calculation. Using two input femtosecond pulse might be applied to produce the ultrashort pulse.

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