



Fig. 7. Sequential false-color snapshots of the electric field of equal-amplitude, in-phase, 100-fs optical spatial solitons co-propagating in glass [7]. The optical pulses propagate from left to right at the speed of light in glass. This illustrates the dynamics of a potential all-optical “AND” gate, i.e., light switching light, that could work on a time scale  $1/10,000^{\text{th}}$  that of existing electronic digital logic.