

Abstract Submitted
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Propagation of Broad Spectrum Pulse in EIT Medium QINGQING

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— We investigate the possibility of broad spectrum pulse propagation in an elec-
tromagnetically induced transparency (EIT) medium without large distortion. The
pulse is separated into different spectrum bands. Each band propagates in an EIT
window whose center is adjusted to the band center. After proper phase compensa-
tions these bands are recombined. The outgoing pulse suffers little distortion and
absorption, compared to the propagation in one EIT window. Using this method
we can remove the restriction to pulse width in slow light experiments.

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