

Abstract Submitted  
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**Delaying wave field filamentation in focusing Kerr media<sup>1</sup>**

VLADIMIR MALKIN, NATHANIEL FISCH, Princeton University — Coherent wave packets can traverse focusing Kerr-like media at powers smaller than the critical power of self-focusing. However, at powers much larger than the critical power, wave packets tend to break into many filaments for times not much exceeding the self-focusing time. This work shows how this filamentation can be significantly delayed by proper randomizing of the wave packet Fourier components.

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