

Abstract Submitted  
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**Optical Precursor in Hot Rubidium Vapor** WENLONG YANG,  
MATTHEW SPRINGER, ALEXANDRE KOLOMENSKI, GEORGE KAT-  
TAWAR, ALEXEI SOKOLOV, Department of Physics, Texas A&M University —  
A pico-second pulse with center wavelength about 795nm was sent through a hot  
rubidium (Rb) cell. The output pulse was detected by a streak camera with 2 pico-  
second resolution. The experiment data showed the original pulse separates to a  
main pulse and a precursor which travels faster than the main pulse. This gives  
some experiment evidence of the formation of precursor when a step-function-shape  
electromagnetic pulse travels through a Lorentz absorber, which was proposed by  
Dr. A. Sommerfeld and Dr. L. Brillouin about 100 years ago.

Wenlong Yang  
Department of Physics, Texas A&M University

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