

Abstract Submitted  
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**Propagation of photon in a hot and dense medium** SAMINA MASOOD, University of Houston, Clear Lake — We study the vacuum polarization tensor of QED (quantum electrodynamics) at high temperatures and densities to evaluate the coupling constant of QED in such a medium. In this study we can discuss the dispersion of light in a stellar medium showing that certain frequencies can be trapped and the others can propagate through media.

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