

Abstract Submitted  
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**A Basic Analysis of Electrons Crossing a Plasma Wave and or Electromagnetic Wave** ARNESTO BOWMAN, RONALD WILLIAMS, Florida A&M University — Simulations examining the interaction of a HeNe laser and a 5 to 50 keV electron beam are being presented. Laser intensity and beam current are a couple of the parameters that will be adjusted within the models. The hope of the study is to produce a novel way of measuring electron beam properties and the residual laser. We also examine the crossing of a plasma wave and electron beam (5 to 50 keV) at different angles. Beam current, beam length, and plasma wave magnitude are a few of the parameters that can be varied. The models should give results on how the varying of the previously mentioned parameters has on the beam path, speed, and trapping.

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