

Abstract Submitted
for the DPP05 Meeting of
The American Physical Society

Characteristics of an Electron Beam for User in Plasma Wave Probe Measurements ARNESTO BOWMAN, STACI BROWN, R. WILLIAMS, Florida A&M University — We discuss measurements made to characterize an electron beam (5 to 50 keV) which is being used in experiments designed to measure the amplitude of laser generated plasma waves. Recently, the electron gun was operated in the pulsed mode with pulse lengths of 10 to 100 ns. Also the electron gun was pulsed synchronously with a gas jet plasma source, YAG laser and optical detectors. Also to be discussed are the Faraday Cup for measuring beam current, beam emittance measurements and calculations, and deflection of the electron beam by the earth's magnetic field..

Ronald Williams
Florida A&M University

Date submitted: 30 Aug 2005

Electronic form version 1.4