

Abstract Submitted  
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**A Static Energy-Angle Analyzer** BRIAN TENNYSON, St. Mary's College of Maryland — Current techniques for measuring the energies of electrons and ions rely on using a variable voltage electric field and scanning voltage to observe the energy spectra of the electrons/ions. This has the disadvantage of tuning to a narrow energy band and thereby missing all particles outside this energy band. We overcome this disadvantage using a simple parallel plate analyzer that exploits the parabolic path of the particle through the field to simultaneously measure the energies of the complete spectrum of electrons/ions with a resolving power of less than 1 percent of the energy of the ions being observed.

Brian Tennyson  
St. Mary's College of Maryland

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