Booster Applications Facility Instrumentation*

D. M. GASSNER, S. BELLAVIA, K. A. BROWN, I. H. CHIANG, P. PILE, R. PRIGL; BNL
Brookhaven National Laboratory, Upton, NY 11973, U.S.A

Abstract

A new experimental facility being at built at BNL will take advantage of heavy-ion beams from the AGS Booster for radiation effects studies of importance for the Space Program. A large dynamic range response is necessary to accommodate a wide variety of species (protons to gold) and energies (100 MeV/amu to 1.3 GeV/amu). The instrumentation proposed for extraction control and transport diagnostics will include phosphor screens with video cameras, segmented wire ionisation chambers, ion chambers, and scintillators. Design and development of these systems will be presented.

* Work performed under auspices of the U. S. Department of Energy.