Abstract Submitted
for the DNP12 Meeting of
The American Physical Society

Measurements of 10B(p,a)7Be Cross-sections: A Reaction Relevant to Nuclear Fusion Energy Research BARBARA FISHER, Richard Stockton College of NJ, ADAMOS KAFKARKOU, MOHAMMAD AHMED, HENRY WELLER, LUKE MYERS, Duke University, MARK SPARKER, North Georgia State University, WILLIAM ZIMMERMAN, University of Connecticut, JON MUELLER, Duke University, MARK SIKORA, George Washington University, INDRAL MAZUMDAR[1], Duke University — There is growing interest in aneutronic nuclear fusion reactors. One facility proposes to utilize the 11B(p,a)7Be reaction. The Radiative Capture Group at Triangle University Nuclear Laboratory (TUNL) has been engaged in a long-term study of this and related reactions. This poster will present preliminary data and analysis of the 10B(p,a)7Be reaction which is of interest because 10B is a potential reactor contaminant. Differential and total cross-sections will be presented for incident protons of 4.4 and 4.6 MeV. The data is necessary for simulations of an aneutrionic nuclear fusion reactor.

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Date submitted: 06 Aug 2012 Electronic form version 1.4