Cross-section Measurements of $^{11}$B($n$, $n'\gamma$)  

M.S. JOHNSON, J.A. BECKER, L.A. BERNSTEIN, J.R. COOPER, P.E. GARRETT, D.P. MCNABB, W. YOUNES, LLNL, Livermore, CA 94550, M. DEVLIN, N. FOTIADES, T.S. HILL, R.O. NELSON, LANSCE-NS, LANL, Los Alamos, NM 87545 — Excitation of high-energy states in $^{11}$B via inelastic neutron scattering is important to nuclear reaction studies. Measurements of the above reaction were conducted at LANL at the LANSCE facility. A 4.5 mm thick target of $^{11}$B was bombarded with a continuum energy-spectrum of neutrons produced from a spallation source at the LANSCE facility at LANL. High-energy gamma-rays were measured using HPGe detectors in the GEANIE array. The neutron energies were determined by the time-of-flight technique. We will present and discuss results for the cross-section measurements of $^{11}$B($n$, $n'\gamma$). We will compare and contrast the results with previous measurements.

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2present address: USEC Inc, Piketon OH 45661

3present address: Physics Department, University of Guelph, Guelph, Ontario, Canada, N1G2W1

Micah Johnson
LLNL

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