Inverse-kinematics Proton Scattering from 51Ca

SEAN GREGORY, Ursinus College — We have studied 51Ca using inverse kinematics proton scattering. The experiment was run at the National Superconducting Cyclotron Laboratory (NSCL) using the GRETINA gamma-ray tracking array and the Ursinus College/NSCL liquid hydrogen target. We used geant4 simulations to extract gamma-ray intensities from the measured gamma-ray spectrum. The reaction populated five excited states of 51Ca. We observed a new gamma ray with an energy of 3950 keV. Preliminary results will be discussed.

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