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**A data selection and reduction for asymmetry analysis in the NPDGamma experiment** DAVID BLYTH, Arizona State University, NPDGAMMA COLLABORATION — The NPDGamma experiment intends to measure the parity-violating asymmetry in the direction of emitted photons from the capture of cold, polarized neutrons on protons. The $np \to d\gamma$ reaction is dominated by $\Delta I = 1$ transitions, and the asymmetry can be unambiguously related to corresponding contributions of the hadronic weak interaction. The experiment is currently operated at the Fundamental Neutron Physics Beamline (FNPB) of the Spallation Neutron Source at ORNL with the ultimate goal of a $10^{-8}$ measurement of the asymmetry. As an initial data selection technique for one of the parallel analyses of final data being taken by NPDGamma, a linear correlation method applied to beam intensity monitors is developed and implemented to remove irregular conditions of the pulsed 60 Hz cold neutron beam provided by the FNPB. A method for reduction of the asymmetry data will also be presented with the goal of minimizing statistical uncertainty due to beam and detector-gain fluctuations.

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