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The Data Acquisition System for the BGOegg experiment¹ KEIGO MIZUTANI, Department of Physics, Kvoto University, TAKATSUGU ISHIKAWA, Research Center for Electron Photon Science, Tohoku University, HI-ROTOMO HAMANO, Research Center for Nuclear Physics, Osaka University, MANABU MIYABE, RYUJI YAMAZAKI, Research Center for Electron Photon Science, Tohoku University, SHINICHI MASUMOTO, Department of Physics, University of Tokyo, YUSUKE TSUCHIKAWA, NORIHITO MURAMATSU, Research Center for Electron Photon Science, Tohoku University, LEPS2/BGOEGG COL-LABORATION — The BGOegg experiment has started in December 2013 at SPring-8/LEPS2 facility. The aim of the experiment is to study hadron properties via photo-production using high-intensity and linear-polarized photon beam generated by backward Compton scattering with 8-GeV electrons in SPring-8 and photons from external lasers. The event rate of this experiment is expected to be about 1 kHz. In order to take data with the efficiency over 90% for 1 kHz trigger rate, we have constructed the data acquisition system mainly consisting of FERA-UIO and VME-TDC subsystems. The BGOegg detector system consists of a beam tagging counter, the BGOegg electromagnetic calorimeter, a cylindrical drift chamber, inner plastic scintillators, a forward drift chamber, and forward TOF-RPCs. The tagging counter and the BGOegg participate in the trigger. The number of readout channels is over 2500 in total. For the readout of these detectors with short dead time, we use 16 collector VME CPUs distributed over TCP/IP networks. We will present details and the performance of the BGOegg data acquisition system.

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