## Results from the HPS Commissioning Run

## January 9, 2015

The overwhelming evidence for the existence of dark matter is yet to be confirmed by direct detection. A dark photon could resolve existing puzzles in particle physics and provide a coupling with ordinary matter, but the parameter space of MeV-GeV masses and small couplings remains largely unexplored by experiments. The Heavy Photon Search in Hall-B at Jefferson Lab was designed to search for such a photon, radiated by few-GeV electrons, via its mass and vertex signatures in its decay to  $e^+e^-$ . The detector consists of a compact silicon tracker in a dipole field for momentum and vertexing resolution, combined with a calorimeter for triggering and energy measurements. At the end of 2014, we commissioned the calorimeter and triggering system at the design luminosity. Preliminary results on expected and measured inclusive electron rates, as well as reconstruction of  $e^+e^-$  invariant mass, will be presented.