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DEVELOPING A CAMERA-BASED 3D MOMENTUM IMAGING SYSTEM CAPABLE OF 1MHITS/S

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A camera-based three-dimensional (3D) imaging system with a superb time-of-flight (TOF) resolution and multi-hit capability was recently developed for electron/ion imaging [Lee et al. *J. Chem. Phys.* 141, 221101 (2014)]. In this work, we report further improvement of the event rate of the system by adopting an event-driven camera, Tpx3Cam, for detecting the 2D positions of electrons, while a high-speed digitizer provides highly accurate (~ 30 ps) TOF information for each event at a rate approaching 1 Mhits/sec.