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Development of Gas Electron Multiplier Detectors at Hampton University¹ MICHAEL KOHL, ANGEL CHRISTOPHER, THIR GAUTAM, JESMIN NAZEER, TANVI PATEL, MALINGA RATHNAYAKE, MANJUKR-ISHNA SURESH, Hampton University — Gas Electron Multipliers (GEM) were introduced 25 years ago and have since been developed for a large variety of nuclear and particle physics experiments and applications. They are radiation hard, high-rate capable, and easy to handle. GEM detectors for ionizing charged particle detection including readout electronics are assembled from pre-manufactured parts by university-based students and postdocs, before the final products are deployed in experiments at off-campus research facilities. I will report about GEM detectors developed by my group at Hampton University, and their use in recent and in planned experiments (OLYMPUS, MUSE, DarkLight, TPEX, SBS).

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