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**The HPS Experiment: Searching for Dark Photons at Jefferson Lab**

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Recently, there has been much interest in new physics models with hidden sectors with massive U(1) gauge bosons, called heavy photons or dark photons. Heavy photons are expected on general theoretical grounds, and astrophysical evidence suggesting they might mediate dark matter annihilations and/or interactions with ordinary matter has motivated the search for a heavy photon in the mass range  $m_{A'} \sim 20$  to 1000 MeV/c<sup>2</sup>. Heavy photons couple to ordinary photons through kinetic mixing, which induces their weak coupling to electrons, so they are radiated in electron scattering and can subsequently decay into narrow  $e^+e^-$  resonances which can be observed above the QED background. The Heavy Photon Search (HPS) experiment at Jefferson Lab will search for the  $e^+e^-$  or  $\mu^+\mu^-$  heavy photon decay products using a forward spectrometer that includes silicon microstrip detectors for vertexing and tracking, a PbWO<sub>4</sub> electromagnetic calorimeter for fast triggering and electron identification, and a muon detector for muon identification. HPS will explore a large, unexplored domain in the mass/coupling plane with great sensitivity. This talk will review the experiment, with results from the recent test run and plans for future construction and data taking.