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The E36 Experiment at J-PARC[1] MICHAEL KOHL, Hampton University, TREK COLLABORATION — The E36 experiment is planned to run at the J-PARC K1.1BR kaon beamline in 2014-15 using a stopped kaon beam along with the TREK target and detector setup. The decay products of stopped positive kaons will be observed with a large-acceptance toroidal spectrometer capable of tracking charged particles with high resolution, combined with a photon calorimeter with large solid angle and redundant particle identification systems. With the aim to test lepton universality in the $K_{e2}/K_{\mu 2}$ ratio with high precision, the experiment is highly sensitive to new physics beyond the Standard Model. A further goal of E36 is to search for a heavy sterile neutrino in two-body kaon decay, along with additional searches for exotic decay modes. An overview of the planned experiment, results from recent R&D activities, and the current project status will be presented.

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