

Abstract Submitted
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^7Be Solar Neutrino Measurement with KamLAND CHRISTOPHER GRANT, University of California, Davis, KAMLAND COLLABORATION — KamLAND is a multipurpose, 1-kton liquid scintillation detector located in the Kamioka underground laboratory, in Japan. Two distinct liquid scintillator purification campaigns were performed in 2007 and 2008-2009, where the background event rates from decays of ^{85}Kr , ^{210}Bi , and ^{210}Po were reduced by factors of 6×10^{-6} , 8×10^{-4} , and 5×10^{-2} , respectively. This dramatic suppression of low-energy backgrounds increased KamLAND's sensitivity to new physics below 1 MeV. We report a measurement of the 862 keV ^7Be solar neutrino flux with KamLAND, thereby providing the first independent cross-check of this important quantity. The details of the solar neutrino analysis will be presented, along with a comparison to Standard Solar Model flux predictions.

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