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β-delayed γ-decay of ^{26}P[1] DAVID PEREZ-LOUREIRO, C. WREDE, M. B. BENNETT, S. N. LIDDICK, NSCL/MSU, E10034 COLLABORATION — The β-decay of proton-rich nuclei is a powerful tool in nuclear science; it can be used to probe quenching of the Gamow-Teller strength, isospin asymmetries, and nuclear astrophysics. ^{26}P β-delayed γ-decay has been recently measured at the National Superconducting Cyclotron Laboratory at MSU with much higher sensitivity than the previous experiment. A fast ^{26}P beam produced using nuclear fragmentation was implanted into a planar germaninum detector. This detector was surrounded by the SeGA germanium array in order to detect the γ rays emitted in coincidence with β-decays with high resolution. Absolute γ-ray intensities were measured and a complete decay scheme was built for the allowed transitions to bound excited states of ^{26}Si. Log ft values and Gamow-Teller strengths were determined for each transition and compared to shell model calculations and the β-decay of its mirror nucleus ^{26}Na. Results of this study, including a larger Gamow-Teller quenching than the *sd* shell average and a substantial mirror asymmetry between the β^+ and β^- transitions to the first excited states of ^{26}Si and ^{26}Mg, respectively, will be presented and interpreted.

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