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New results for the β decay of ¹⁴⁴Cs into ¹⁴⁴Ba RICHARD SCOT-TEN, Ohio Wesleyan University, MICHAEL CARPENTER, SHAOFEI ZHU, Argonne National Laboratory — The partial level structure of neutron-rich ¹⁴⁴Ba was deduced following the β decay of ¹⁴⁴Cs. The number of known levels has been greatly expanded, and states with spins $\leq 5\hbar$ have been observed. The experiment was conducted using a re-accelerated beam of ¹⁴⁴Cs extracted from CARIBU, and implanted in a Pb foil placed at the target position of the Gammasphere array. The comparative β decay half-life, log ft, has been classified according to the degree of forbiddenness for 102 transitions which feed the 2_1^+ in ¹⁴⁴Ba. A preliminary result of 5.83(4) favors a positive parity assignment for the ¹⁴⁴Cs spin-1 groundstate.

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