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Johanna N.Y. Franklin* (johanna.franklin@uconn.edu), Department of Mathematics, 196 Auditorium Road, University of Connecticut, Unit 3009, Storrs, CT 06269-3009, and **Keng Meng Ng**. *Weak Demuth randomness and computational strength*.

Strong randomness notions tend to correspond to low computational strength. For instance, a real is difference random if and only if it is Martin-Löf random and does not compute $0'$, and a real is weakly 2-random if and only if it is Martin-Löf random and does not compute any nonrecursive r.e. set. We will present a similar characterization of weak Demuth randomness: a real is weakly Demuth random if and only if it is Martin-Löf random and does not compute any strongly prompt r.e. set. (Received February 12, 2013)