1070-03-288   **Johanna N.Y. Franklin*** (`johannaf@gauss.dartmouth.edu`), Department of Mathematics, 6188 Kemeny Hall, Dartmouth College, Hanover, NH 03755, and **Keng Meng Ng**. *ω-r.e. randomness.*

Previously, we strengthened the notion of Martin-Löf randomness by requiring that a random real avoid not only all Martin-Löf tests but all tests whose components are n-r.e. sets of open sets for a fixed n. Now we extend this notion to that of f-r.e. randomness for any recursive function f by requiring that the kth component of a test be an $f(k)$-r.e. set of open sets for each k. We further say that a real is ω-r.e. random if it is f-r.e. random for every recursive f. Here, we present some basic results on ω-r.e. and f-r.e. randomness and describe the relationship of the former to other strong randomness notions. (Received February 14, 2011)