1056-03-71   **Joseph S. Miller*** (`jmiller@math.wisc.edu`), University of Wisconsin-Madison, Department of Mathematics, 480 Lincoln Drive, Madison,, WI 53706-1388. *Randomness and computational strength.*

One of the themes that has emerged in the study of effective randomness is that there is a negative correlation between randomness and computability-theoretic strength. Not only are more random reals less useful as oracles, but assuming that a random real is computationally weak implies a greater degree of randomness. We will explore the evidence for these assertions and look at some of the reasons why this inverse relationship should not be entirely surprising. As part of understanding this pattern, we will consider what it means for one real to be "more random" than another. (Received September 15, 2009)