1096-03-1276 **Gregory Igusa*** (gigusa@nd.edu). *The Generic Degrees of Coarsely Computable Reals.*

A real is *generically computable* if there is an algorithm which halts almost everywhere (in the sense of limiting density 1) and which correctly computes the real wherever it halts. This definition is inspired by the phenomenon from complexity theory, where a generic (ie, typical) instance of a problem might be much easier to solve than the most difficult instances of the problem. A real is *coarsely computable* if there is an algorithm which halts everywhere, and which correctly computes the real almost everywhere.

If we attempt to study the degree structure for generic reducibility, we are forced to consider oracles which do not always halt, and this causes the reducibility to be very difficult to work with, and in fact, to be $\mathbf{\Pi^1_1}$-complete. The generic degrees of the coarsely computable reals display a number of interesting properties, provide a good vantage point for understanding the structure of the generic degrees, and also provide us with a an interesting characterization of the hyperarithmetical Turing degrees in terms of generic reduction. (Received September 14, 2013)