In a recent paper, Jockusch and Schupp introduce and analyze the notion of generic computation. A generic computation of a real is a partial recursive function which correctly computes most of the bits of the real, but which may diverge on some inputs, provided that these inputs have an asymptotic density of 0 in the natural numbers. It turns out that this notion of computation has many properties that are rather counterintuitive from a recursion theoretic point of view.

We present our result that there are no minimal pairs for generic computation, in the sense that for any nonrecursive reals $A$ and $B$, there is a real $C$, which is not generically computable, but such that $C$ can be computed from either $A$ or $B$. Downey, Jockusch, and Schupp proved this result in the case where $A$ and $B$ are both $\Delta^0_2$, and indeed this distinction appears to be significant, in that our technique requires a nonuniformity in the algorithm, based on whether one, both, or neither of the reals is $\Delta^0_2$. (Received December 10, 2011)