

## EVERY 1-GENERIC COMPUTES A PROPERLY 1-GENERIC

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A real is  $n$ -generic iff for all  $\Sigma_n^0$  sets of strings  $S$ , there is some initial segment  $\sigma$  of  $A$  such that  $\sigma \in S$  or  $\sigma \not\leq \tau$  for all  $\tau \in S$ . A real is called properly  $n$ -generic if it is  $n$ -generic but not  $n+1$ -generic. We show that every 1-generic real computes a properly 1-generic real. On the other hand, if  $m > n \geq 2$  then an  $m$ -generic real cannot compute a properly  $n$ -generic real.

This is joint work with Rod Downey, Noam Greenberg, Denis Hirschfeldt, and Joe Miller.