1112-03-26 **Timothy McNicholl*** (mcnichol@iastate.edu), Department of Mathematics, Iowa State University, Ames, IA 50011. *Computable copies of lp spacces.*

Suppose p is a computable real so that $p \geq 1$. It is shown that the halting set computes a surjective linear isometry between any two computable copies of ℓ^p. It is also shown that this result is optimal in that when $p \neq 2$ there are two computable copies of ℓ^p with the property that any oracle that computes a linear isometry of one onto the other must also compute the halting set. These results hold in both the real and complex case. (Received June 02, 2015)