1123-03-364 **Uri Andrews***, 480 Lincoln Dr., Madison, WI 53706. *The structure of computably enumerable equivalence relations.*

We say that a relation R on ω is reducible to a relation S on ω if there is a total computable function f so that $R(x_1, \ldots, x_n)$ holds if and only if $S(f(x_1), \ldots, f(x_n))$. This is a computability-theoretic analog of Borel reducibility, and, as in the Borel theory, we pay special attention to this reduction on equivalence relations. Note that this is akin to looking for computable maps (preserving equivalence and non-equivalence) from one equivalence structure to the other, thus also being similar to the trend of looking at computable isomorphisms between discrete structures.

We consider the degree structure of computably enumerable equivalence relations under this reduction and I will try to introduce and share as much as possible of what we know about this degree structure.

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