

1099-03-390

Konstantinos A. Beros* (beros@unt.edu), Department of Mathematics, University of North Texas, GAB 435, 1155 Union Circle, Denton, TX 76203-5017. *Co-analytic ideals on ω .*

We say that $f : \omega \rightarrow \omega$ is a *weak Rudin-Keisler map* if the domain of f is an infinite (possibly proper) subset of ω . If \mathcal{I} and \mathcal{J} are ideals on ω , we say that \mathcal{I} is *wRK-reducible* to \mathcal{J} if there is a weak Rudin-Keisler map f such that, for each $A \subseteq \omega$, one has $A \in \mathcal{I} \iff f^{-1}(A) \in \mathcal{J}$. We show that there is a wRK-complete co-analytic ideal, i.e., a co-analytic ideal to which every co-analytic ideal is wRK-reducible. The method of our proof also yields a simple proof to a theorem of Hjorth on co-analytic equivalence relations.

We will mention some analogous results for ideals on ω which belong to other projective classes. (Received February 11, 2014)