

1145-54-759

Joan E Hart*, University of Wisconsin Oshkosh, Mathematics Department, 800 Algoma Boulevard, Oshkosh, WI 54901-8631, and **Kenneth Kunen**. *Hereditarily Good Properties*.

We consider regular Hausdorff spaces that are Hereditarily Good (HG). The HG property is a natural strengthening of both Hereditarily Separable (HS) and Hereditarily Lindelöf (HL). A space X has the property HG iff X has no weakly separated ω_1 -sequences iff for all assignments $\mathcal{U} = \langle (x_\alpha, U_\alpha) : \alpha < \omega_1 \rangle$, where each $x_\alpha \in U_\alpha$ and each U_α is open, $\exists \alpha \neq \beta [x_\beta \in U_\alpha \ \& \ x_\alpha \in U_\beta]$. Then, as for HS and HL, (see, for example, the S and L surveys by Rudin or Roitman) a space X is strongly HG (stHG) if each finite power X^n is HG. Replacing the pair α, β by \aleph_1 elements of X strengthens stHG to super HG (suHG); that is, a space X is suHG iff $\forall \mathcal{U} \exists I \in [\omega_1]^{\aleph_1} \forall \alpha, \beta \in I [x_\alpha \in U_\beta]$. So every space having countable net weight is trivially suHG. We introduce an HG property that is equivalent to countable net weight. (Received September 14, 2018)