

1086-26-2760

M. J. Sanders* (mjsander@uscb.edu). *On the Closure of the Space of Substantially Darboux-like Honorary Baire Two Functions on \mathbb{R}^n* . Preliminary report.

A function $f : \mathbb{R}^n \rightarrow \mathbb{R}$ is said to be an *honorary Baire two function* if there exists a Baire one function $g : \mathbb{R}^n \rightarrow \mathbb{R}$ which agrees with f on a co-countable set. A function $f : \mathbb{R}^n \rightarrow \mathbb{R}$ is *substantially Darboux-like* if for each open connected set U in \mathbb{R}^n and for each $U \subset S \subset \bar{U}$ (the closure of U), $f(S)$ is an interval. On \mathbb{R} , the classes of Darboux and substantially Darboux-like functions are identical. Results regarding the closure of the space of substantially Darboux-like honorary Baire two functions are discussed. (Received September 25, 2012)