1129-03-399 **Reese Johnston***, rwjohnston@math.wisc.edu. Computability in 2^{ω_1} .

Cantor space has been an object of significant study in computability theory; of particular interest are the properties of Π_1^0 classes, or "computably closed" sets. It seems natural to ask whether this wealth of results can be transferred to other topological spaces that are in some sense similar. One possible direction for this study is the theory of Polish spaces; we take another direction, using admissible recursion theory to study 2^{ω_1} , a space that is much larger but conceptually similar. (Received March 20, 2017)