



Nonstandard Analysis in Topology

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We present Nonstandard Analysis by three axioms: the $\{\text{em Extension, Transfer and Saturation Principles}\}$ in the framework of the superstructure of a given infinite set. We also present several applications of this axiomatic approach to point-set topology. Some of the topological topics such as the Hewitt realcompactification and the nonstandard characterization of the sober spaces seem to be new in the literature on nonstandard analysis. Others have already close counterparts but they are presented here with essential simplifications.

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