

Rudin Dowker spaces

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A construction scheme of topological spaces, which generalizes M. E. Rudin's construction of a Dowker space in $\mathbf{ZFC}$, will be presented, and shown to produce a proper class of spaces. From $\mathbf{ZFC}$ alone it is provable that a proper subclass of this class of spaces consists of collectionwise normal Dowker spaces. The theory $\mathbf{ZFC} + \mathbf{SSH}$, where $\mathbf{SSH}$ is Shelah's Strong Hypothesis, implies that every space in this class is collectionwise normal Dowker. Whether all members of this class are Dowker in $\mathbf{ZFC}$ is still open.