

The Shape of Compact Covers

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The aim of this work is to uncover the possible ‘shapes’ of compact covers of spaces, particularly subspaces of the reals. The main technical tool - which makes precise the notion of ‘shape’ of a compact cover - is that of the relative Tukey order and equivalence. We will see that there is an unexpected connection with Menger sets, and we will apply our results to distinguish free topological groups of separable metrizable spaces.

*This is joint work with Ziqin Feng (Auburn University).