

# Designing interesting topological spaces using decompositions

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## **Abstract**

In the first lecture we will study the elementary properties of upper semi-continuous decomposition and the relationship to proper maps.

In the second lecture we will study the shrinkability criterion. We will also learn the role of cellular sets and some important results concerning cellular decompositions.

In the third lecture we will peruse several examples of decompositions and investigate their properties. We will show how to design intriguing topological spaces.