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**From Spaces to Categories (and Back!)**

*In many fields of mathematics, algebraic models for geometric objects play an important role. In order to construct algebraic objects that are capable of being used to analyze homotopy types, it is necessary to introduce objects that have the same kind of “collapsing” and “thickening” properties that homotopy types do. It turns out that categories have exactly these kinds of properties. In this talk we will explore the connection between category theory and homotopy theory and illustrate the general approach with several key small examples.*