

## WHAT IS GEOMETRY?

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Geometry was revolutionised in the middle of the 20th century by Grothendieck and his school. This vast change in point of view and method has broadened the scope of geometry to include algebra, category theory and logic. This revolution is still ongoing and has now incorporated into it the methods of homotopy theory. I will explain what this point of view on geometry is and the implications of this on the practice of mathematics. I will also discuss how geometry might benefit from homotopy type theory.