String theory says we live in a ten-dimensional universe, but that only four are accessible to our everyday senses. According to theorists, the missing six are curled up in bizarre structures known as Calabi-Yau manifolds. The discoverer of these manifolds, Professor Shing-Tung Yau, will describe in general terms how geometry enables the understanding of spacetime and trace its historical development from the ancient Greeks through Einstein to modern string theory, analysing the contributions of many great geometers and physicists along the way.

Professor Yau has been a Professor of Mathematics at Harvard University since 1987 and is the current department chair. Born in Shantou, China, he was educated in Hong Kong and from there moved to the United States, where he obtained his PhD at the University of California, Berkeley in 1971, under the great geometer of the 20th century, Shing-Shen Chern.

Professor Yau is one of the most famous and influential figures in modern mathematics and has won many major international prizes, including the prestigious Fields Medal of the International Mathematical Union in 1982, the US National Medal of Science in 1997 and very recently in 2010 the Wolf Prize.