

Song Sun

Title: Geometry of Einstein metrics.

Abstract: Einstein metrics serve as the counterpart in Riemannian geometry to Einstein spacetimes in general relativity. As one of the most important geometric structures, the study of Einstein metrics is deeply connected to various branches of mathematics, including complex algebraic geometry, low-dimensional topology, partial differential equations, and mathematical physics. In this talk we will discuss recent advances in understanding the geometry of Einstein metrics, especially in dimension 4.