

Abstract:

In 1968, S.-S. Chern raised to attention the question that there might be further Riemannian obstructions for a manifold to admit an isometric minimal immersion into an Euclidean space. This question triggered a whole new direction of study in the geometry of submanifolds. In the last two decades, there have been important advances in the study of new curvature invariants. We will present a few recent developments in this theory, and we focus our attention on several classes of inequalities in the geometry of submanifolds in Riemannian and Kaehlerian context.